# Neg – Biotech – Starter Packet

## AT: Dual Use Advantage

### AT: Biodiversity

#### Bio-d’s not existential and try-or-die is wrong. Nature’s a luxury, not a necessity.

Keim, 19—freelance journalist whose work has appeared in publications including The Atlantic, WIRED, National Geographic News, Aeon, Nautilus, Scientific American Mind, The Guardian, Audubon Magazine, Grist, Mother Jones, Conservation, NOVA, and Anthropocene (Brandon, “Conservation for the World We Want,” Breakthrough Journal, No. 11, Summer 2019, dml)

A slogan’s purpose, of course, isn’t to capture nuance. But there are ways in which this save-it-or-die framing rankles, beginning with the fact that, at precisely the same time as so many wild lives are imperiled, billions of people are enjoying historically unprecedented prosperity and health. That is not to say that economic well-being automatically flows from nature’s destruction, or that future well-being requires it, but simply that it has not yet precluded human flourishing.

Returning to megafauna and fire, Earth is more fire-prone than it once was, but people have managed — not without suffering, often with difficulty, but managed all the same. The depletion of whale populations and terrestrial megafauna reduced nutrient flows from the deep sea and across landscapes to a trickle, but the consequences were not catastrophic for us. Indeed, the state of nature that conservationists hope to protect, and present in terms of human self-interest, has already been radically transformed from just a few thousand years ago — not just because of the late Pleistocene mass extinctions, but also because of the dwindling of what and who remains.

Global turtle populations, to pick one little-appreciated example, have collapsed. Not long ago they existed in densities that, in terms of total per-hectare biomass, often outweighed that of African savannah herbivores like elephant and giraffes. Now turtles “are struggling to persist in the modern world,” as a recent scientific review described their plight. “Their ecological roles are now greatly diminished,” and “The impacts of their lessened roles are poorly appreciated and inadequately understood.” Perhaps the loss of all that habitat engineering (many turtles dig burrows that are used by other creatures and contribute to long-term soil enrichment), seed dispersal, and nutrient cycling has diminished human well-being in significant ways, but it’s a hard argument to make right now.

It is possible, of course, that the effects of turtle decline — and amphibian decline and bat decline and insect decline and megafauna decline, and on and on — have not yet been fully realized, and that human societies are running on a biological “surplus” banked over hundreds of millions of years. By this light, just as people will eventually run out of fuels derived from whole geological epochs’ worth of fossilized plankton and vegetable matter, so might we exhaust soils nourished by organismal activity or air filtered by forest communities now missing animals who once planted their seeds.

Alternatively, one could argue that although even a diminished biosphere was enough to sustain human prosperity, the current 7.7 billion humans and 70 billion domesticated animals they exploit for food have pushed that sustenance to its limits. Taking these precautionary approaches, however, is not quite the same as directly equating human health, security, and prosperity with a recent snapshot of nature — especially when that version of “nature” is implicitly equated with biological diversity and abundance, and even as so much of what we take from the biosphere comes from simplified ecosystems.

Tree plantations still sequester carbon dioxide and exhale oxygen while generating wood. Defaunated wetlands still filter water and buffer against storms. Most of the food we eat comes from comparatively low-diversity croplands. Restoring, say, soil biodiversity to the plains of central North America, the world’s most productive agricultural landscape, is more about reducing chemical use and changing farming techniques to ensure their long-term productivity than returning them to their former prairie glory.

To be sure, these human-directed systems are often less multifunctional than higher-biodiversity systems. Monoculture tree plantations store less carbon than wild forests, and defaunated wild forests store less carbon than those with intact animal communities. But conceiving of engineered ecosystems in terms of resource yield and a few other metrics is terribly reductionist.

Arguably, the greatest service of all is the long-term stability that intact ecologies provide. Species interactions and functional redundancies help ecosystems — and ultimately the biosphere itself — adapt to environmental fluctuations, regrouping and supporting complex arrangements of life even when Earth’s climate changes or an asteroid strikes.

Yet that particular service isn’t one that maps neatly onto short-term human interests in wood production, clean water, or fisheries yield. And to casually say those benefits come from “nature” erodes, or at least blurs, what conservationists want to protect: forms of nature in which communities and processes found in the absence of humans remain largely intact, and where human activity doesn’t divert their yields without nourishing more nonhuman life in return. To view, say, the pollination of commodity crops by managed honeybees trucked cross-country as an example of nature’s bounty would be to diminish nature.

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This critique is not intended to downplay the hardships caused by nature’s decline and destruction. The recent Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report, which estimated that one in eight species of plants and animals is now threatened with extinction, enumerates them well. Nature indeed “sustains the quality of the air, fresh water and soils on which humanity depends, distributes fresh water, regulates the climate, provides pollination and pest control and reduces the impact of natural hazards,” and the impacts of ecological disruption are felt most by people who possess the least.

Ultimately, though, human ingenuity can substitute for many of nature’s services. The results might be unpleasant in many ways — I’d much rather rely on bats and earthworms than pesticides and fertilizers — but they’re rarely an existential threat to human societies. The vast, fertilizer-fueled Gulf of Mexico dead zone is a horrible, shameful thing and has inflicted hardship on many people, but southeastern U.S. coastal communities have not collapsed because of it.

### AT: Bioterror

#### Bioterrror fails

**Pinker 18** – Steven Arthur Pinker is a Canadian-American cognitive psychologist, Professor at Harvard University. [Enlightenment Now: The Case for Reason, Science, Humanism, and Progress, Viking, Penguin Group]//BPS

Biological agents are particularly ill-suited to terrorists, whose goal, recall, is not damage but theater (chapter 13).58 The biologist Paul Ewald notes that natural selection among pathogens works against the terrorist’s goal of sudden and spectacular devastation. 59 Germs that depend on rapid person-to-person contagion, like the common-cold virus, are selected to keep their hosts alive and ambulatory so they can shake hands with and sneeze on as many people as possible. Germs get greedy and kill their hosts only if they have some other way of getting from body to body, like mosquitoes (for malaria), a contaminable water supply (for cholera), or trenches packed with injured soldiers (for the 1918 Spanish flu). Sexually transmitted pathogens, like HIV and syphilis, are somewhere in between, needing a long and symptomless incubation period during which hosts can infect their partners, after which the germs do their damage. Virulence and contagion thus trade off, and the evolution of germs will frustrate the terrorist’s aspiration to launch a headline-worthy epidemic that is both swift and lethal. Theoretically, a bioterrorist could try to bend the curve with a pathogen that is virulent, contagious, and durable enough to survive outside bodies. But breeding such a fine-tuned germ would require Nazi-like experiments on living humans that even terrorists (to say nothing of teenagers) are unlikely to carry off. It may be more than just luck that the world so far has seen just one successful bioterror attack (the 1984 tainting of salad with salmonella in an Oregon town by the Rajneeshee religious cult, which killed no one) and one spree killing (the 2001 anthrax mailings, which killed five).60 To be sure, advances in synthetic biology, such as the gene-editing technique CRISPR-Cas9, make it easier to tinker with organisms, including pathogens. But it’s difficult to re-engineer a complex evolved trait by inserting a gene or two, since the effects of any gene are intertwined with the rest of the organism’s genome. Ewald notes, “I don’t think that we are close to understanding how to insert combinations of genetic variants in any given pathogen that act in concert to generate high transmissibility and stably high virulence for humans.”61 The biotech expert Robert Carlson adds that “one of the problems with building any flu virus is that you need to keep your production system (cells or eggs) alive long enough to make a useful quantity of something that is trying to kill that production system. . . . Booting up the resulting virus is still very, very difficult. . . . I would not dismiss this threat completely, but frankly I am much more worried about what Mother Nature is throwing at us all the time.”62 And crucially, advances in biology work the other way as well: they also make it easier for the good guys [public protectors] (and there are many more of them) to identify pathogens, invent antibiotics that overcome antibiotic resistance, and rapidly develop vaccines.63 An example is the Ebola vaccine, developed in the waning days of the 2014–15 emergency, after public health efforts had capped the toll at twelve thousand deaths rather than the millions that the media had foreseen. Ebola thus joined a list of other falsely predicted pandemics such as Lassa fever, hantavirus, SARS, mad cow disease, bird flu, and swine flu.64 Some of them never had the potential to go pandemic in the first place because they are contracted from animals or food rather than in an exponential tree of person-to-person infections. Others were nipped by medical and public health interventions. Of course no one knows for sure whether an evil genius will someday overcome the world’s defenses and loose a plague upon the world for fun, vengeance, or a sacred cause. But journalistic habits and the Availability and Negativity biases inflate the odds, which is why I have taken Sir Martin up on his bet. By the time you read this you may know who has won.65

### --xt AT: Bioterror

#### No impact to bioterror

**Jefferson, et al, 14** [ Catherine, 21 August 2014 | doi: 10.3389/fpubh.2014.00115, Synthetic biology and biosecurity: challenging the “myths”, Catherine, Jefferson, imageFilippa Lentzos and imageClaire Marris\* Department of Social Science, Health and Medicine, King’s College London, London, UK, Catherine joined SSHM in January 2013. Before joining the department, she worked as a senior policy advisor for international security at the Royal Society, where she led a project on Neuroscience, Conflict and Security. Prior to this she was a research fellow with the Harvard Sussex Program on Chemical and Biological Weapons at the University of Sussex, where she also obtained her DPhil. Catherine’s research interests are focused on the intersection of science and security policy, with a particular emphasis on chemical and biological security, dual use governance of emerging technologies and the growth of the amateur biology community. She is currently involved in research on the social dimensions of synthetic biology within theCentre for Synthetic Biology and Innovation, <http://journal.frontiersin.org/Journal/10.3389/fpubh.2014.00115/full>]

Challenges to Myth 5 There are two dimensions to Myth 5. The first is about the intention of would-be terrorists, and the assumption is that terrorists would seek to produce mass casualty weapons and pursue capabilities on the scale of twentieth century state-level bioweapons programs. While most leading biological disarmament and non-proliferation experts believe that the risk of a small-scale bioterrorism attack is very real and very present, they consider **the risk of sophisticated large-scale bioterrorism attacks to be very small** (65). This is **backed up by historical evidence**. The three confirmed attempts to use biological agents against humans in terrorist attacks in the past were small-scale, low casualty events aimed at causing panic, and disruption rather than excessive death tolls: (i) the Rajneesh cult’s use of Salmonella on salad bars in local restaurants to sicken potential voters and make them stay away from the polls during Oregon elections in 1984; (ii) the 1990–95 attempted use of botulinum toxin and anthrax by the Japanese Aum Shinrikyo cult; (iii) and the “anthrax letters” sent to media outlets and members of US Congress in 2001 resulting in at least 22 cases of anthrax, five of which were fatal (66, 67). The second dimension to Myth 5 is the implicit assumption that producing a pathogenic organism equates producing a weapon of mass destruction. **It does not**. Considerable knowledge and resources are necessary for the processes of scaling up, storage, and developing a suitable dissemination method. These processes present **significant technical and logistical barriers**. Drawing from her in-depth study of the Iraqi, Soviet, and US bioweapons programs (3, 4), Ben Ouagrham-Gormley explains: Scaling up fragile microorganisms that are sensitive to environmental conditions and susceptible to change — and viruses are more sensitive than bacteria — has been one of the stiffest challenges for past bioweapons programs to overcome, even with appropriate expertise at hand. Scaling-up requires a gradual approach, moving from laboratory sample, to a larger laboratory quantity, to pilot-scale production, and then to even larger-scale production. During each stage, the production parameters need to be tested and often modified to maintain the lethal qualities of the agent; the entire scaling-up process can take several years (68). The dissemination of biological agents also poses difficult technical challenges. Whereas persistent chemical agents such as sulfur mustard and VX nerve gas are readily absorbed through the intact skin, no bacteria and viruses can enter the body via that route unless the skin has already been broken. Biological agents must either be ingested or inhaled to cause infection. To expose large numbers of people through the gastrointestinal tract, possible means of delivery are contamination of food and drinking water, yet neither of these scenarios would be easy to accomplish. Large urban reservoirs are usually unguarded, but unless terrorists added massive quantities of biological agent, the dilution effect would be so great that no healthy person drinking the water would receive an infectious dose (66). Moreover, modern sanitary techniques such as chlorination and filtration are designed to kill pathogens from natural sources and would probably be equally effective against a deliberately released agent. Bacterial contamination of the food supply is also unlikely to inflict mass casualties. Cooking, boiling, pasteurization, and other routine safety precautions are generally sufficient to kill pathogenic bacteria. The most likely way to inflict mass casualties with a biological agent is by disseminating it as a respirable aerosol: an invisible cloud of infectious droplets or particles so tiny that they remain suspended in the air for long periods and can be inhaled by large numbers of people. A high-concentration aerosol of B. anthracis or some other pathogen, released into the air in a densely populated urban area, could potentially infect thousands of victims simultaneously. After an incubation period of a few days, depending on the type of agent and the inhaled dose, the exposed population would experience an outbreak of an incapacitating or fatal illness. Although aerosol delivery is potentially the most lethal way of delivering a biological attack, **it involves major technical hurdles that most terrorists would be unlikely to overcome**.To infect through the lungs, infectious particles must be microscopic in size – between 1 and 5 μm in diameter. Terrorists would therefore have to develop or acquire a sophisticated delivery system capable of generating an aerosol cloud with the necessary particle size range and a high enough agent concentration to cover a broad area. Overall, an important trade-off exists between ease of production and effectiveness of dissemination. The easiest way to produce microbial agents is in a liquid form, yet when such a “slurry” is sprayed into the air, it forms heavy droplets that fall to the ground so that only a small percentage of the agent is aerosolized. In contrast, if the bacteria are first dried to a solid cake and then milled into a fine powder, they become far easier to aerosolize, yet the drying and milling process is technically difficult. The Aum Shinrikyo cult struggled with dissemination (67, 69, 70). In one of its anthrax dissemination attempts, it sprayed unknown, but probably very large, quantities of a liquid aerosol (most likely crude culture, unprocessed in any way) of B. anthracis from the roof of the Aum’s headquarters building in Tokyo. For the dissemination, the Aum set up two sprayers on the roof of the eight-story building, each within a large round cooling tower. Pipes were extended from the cooling towers to tanks below, which were filled with a liquid suspension of B. anthracis. The device worked poorly, producing large droplets rather than the very fine aerosol needed for effective transmission of anthrax. It also appears the spore concentration was very low (at least five orders of magnitude below that necessary for a highly infectious wet aerosol). In another dissemination attempt, targeting the area around the Kanagawa prefectural office and the Imperial Palace, the Aum equipped vehicles with spraying devices, but according to prosecutors’ statements, the nozzle of the sprayer clogged and the operation failed. Despite its 200 m2 laboratory containing, amongst other equipment, a glove box, incubator, centrifuge, drier, DNA/RNA synthesizer, electron microscope, two fermenters each having about a 2,000 litre capacity, and an extensive scientific library, and despite its repeated attempts at dissemination, the Aum was unsuccessful in causing any disease, and in retrospect it is clear that the cult did not even make the first substantive step toward an effective bioweapon. If, despite the odds, aerosolization was achieved, the effective delivery of biological agents in the open air is highly dependent on atmospheric and wind conditions, creating additional uncertainties. Only under highly stable atmospheric conditions would the aerosol cloud remain close to the ground where it can be inhaled, rather than being rapidly dispersed. Moreover, most microorganisms are **sensitive to u**ltra**v**iolet radiation and cannot survive more than 30 min in bright sunlight, limiting their use to night-time attacks. One major exception is anthrax, which can be induced to form spores with tough outer coats that enable them to survive for several hours in sunlight. Terrorists could, of course, stage a biological attack inside an enclosed space such as a building, a subway station, a shopping mall, or a sports arena. Such an attack, if it involved a respiratory aerosol, might infect thousands of people, but even here the technical hurdles would by no means be trivial. Finally, even if a biological weapon had been disseminated successfully, the outcome of an attack would be affected by factors like the health of the people who are exposed to the agent, and the speed and manner with which public health authorities and medical professionals detected and were able to respond to the resulting outbreak. A prompt response with effective medical countermeasures, such as antibodies and vaccination, **can significantly blunt the impact of an attack**. Simple, proven ways to curtail epidemics, such as wearing face masks, hand washing, and avoiding hospitals where transmission rates might soar, can also prove effective in stemming the spread of a disease. Indeed, this aspect of a bioterrorism attack is often underplayed in scenarios like Tara O’Toole’s “Dark Winter” and “Atlantic Storm,” where the rates of contagion used are often significantly higher than those in historical cases of natural outbreaks (71).

### at: crispr

#### CRISPR doesn’t overcome barriers

**Revill ’17** [Dr. James Revill, Research Fellow with the Harvard Sussex Program at SPRU, Past as Prologue? The Risk of Adoption of Chemical and Biological Weapons by Non-State Actors in the EU, European Journal of Risk Regulation, 8 (2017), pp. 626–642, https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6B824CDE0E25FD86AC3D0BD07822A743/S1867299X17000356a.pdf/div-class-title-past-as-prologue-the-risk-of-adoption-of-chemical-and-biological-weapons-by-non-state-actors-in-the-eu-div.pdf]

In many cases a degree of determination and dedication will be required merely to separate online fantasy from fact and identify operationally useful information (of relevance to the European context) from nonsense (or information pertinent to contexts other than Europe). Second, with new technologies there is the potential for such tools to enable some, but certainly not all, actors, and even then new technologies bring new challenges. CRISPR, gene editing technology is currently seen as a particular source of promise and peril, which purportedly enables “even largely untrained people to manipulate the very essence of life”.63 As much may be technically true, yet “untrained people” would nonetheless require some guidance in identifying suitable areas of genetic structures to manipulate. Moreover, CRISPR would only get aspiring weaponeers so far, with the process of culturing, scaling-up and weaponisation still requiring considerable attention and interdisciplinary skills, typically generated through “large interdisciplinary teams of scientists, engineers, and technicians”,64 in order to be effective. Indeed, for all the progress in science and technology, biological weapons are still not used, in part, because of the complexity of such weapons; and the chemical weapons that are used today are largely the same as the chemical weapons of 100 years ago. As Robinson noted “It remains the case today that, in the design of CBW, increasingly severe technological constraint sets in as the mass-destruction end of the spectrum is approached: the greater and more assured the area-effectiveness sought for the weapon, the greater the practical difficulties of achieving it”.65

### at: lab theft

#### Labs are super secure

**Chamlee**, Interviewing Damon, **17** Virginia Chamlee, interviewing Inger K. Damon, MD, PhD, the director of the CDC's Division of High-Consequence Pathogens and Pathology, incident commander for the CDC Ebola Response. [This Is What It’s Like to Work with The World's Deadliest Pathogens Every Day, 6-19-2017, https://www.buzzfeed.com/vchamlee/this-is-what-its-like-to-work-with-the-worlds-deadliest]//BPS

Entering a BSL-4 lab requires typing in a unique key code, undergoing an iris scan, and removing all personal clothing, jewelry, and accessories (with the exception of eyeglasses). Next, workers don clothing for the lab: a scrub suit, socks, and inner gloves. Then comes the "spacesuit” — i.e., a full-body, positive-pressure biosafety suit, which Damon said “pushes air out to prevent anything from coming in.” A 2007 photo of the BSL-4 lab &quot;spacesuits.&quot; The suits the scientists currently wear are white instead of orange, and have white boots and black gloves. CDC / Via phil.cdc.gov A 2007 photo of the BSL-4 lab "spacesuits." The suits the scientists currently wear are white instead of orange, and have white boots and black gloves. The suit is so large it adds a solid two to three inches to anyone’s height, thereby restricting movement and making laboratory work even more difficult than it is already. With no air coming in, it also creates a dehydrating environment — which is not necessarily a bad thing, considering how difficult it would be to take a bathroom break. The lab’s security features read like something from Mission: Impossible, specially engineered to prevent microorganisms from being disseminated into the environment. The walls are made of thick, solid concrete, designed to maintain pressure differentials and withstand natural disasters. In essence, they form a sealed internal shell — “to facilitate fumigation and prohibit animal and insect intrusion,” according to the CDC. Floors are designed with a watertight seal. Laboratory furniture is simple, void of sharp corners, and covered in a nonporous material to allow for easy decontamination. Windows (if there are any) are shatter-resistant and sealed. Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption is, perhaps unsurprisingly, entirely off-limits. No phones are allowed inside the lab, but there is a computer from which scientists can access emails and files (though they’d have to do so wearing gloves that make typing a challenge). With the exception of the scientists themselves, who enter and exit the lab each day, nothing can get out. With no air coming in, it also creates a dehydrating environment — which is not necessarily a bad thing, considering how difficult it would be to take a bathroom break. “Any way the virus could potentially escape, there are at least two ways to prevent that from happening,” Damon told BuzzFeed. “The samples are kept in biosafety cabinets, there’s negative pressure in the room, doors are airtight and gasketed. There are multiple ways that, when air is coming out of the lab, it’s then purified and cleaned. And any waste products generated in the lab are autoclaved [i.e., placed into a pressure chamber to sterilize medical waste] and incinerated.” Upon leaving the lab, workers step into a decontamination chamber, which showers a mix of chemicals over their suits to decontaminate anything that may be on the surface. From the chemical shower, they go through an inner changing room, where they take off the suit and everything worn beneath it. The clothing worn in the lab under the spacesuit is treated as a potentially contaminated material, and thoroughly decontaminated before being laundered. Next, lab workers must take a personal shower before entering an outer changing area, where they can then dress into street clothes.

### AT: Food Shortages

#### Russia’s war guarantees price spikes and fertilizer shortages – makes their impact inevitable.

Lu '3/24 [Christina, 3/24/2022, "Russia’s Invasion Unleashes ‘Perfect Storm’ in Global Agriculture," https://foreignpolicy.com/2022/03/24/russia-war-ukraine-food-crisis-wheat-fertilizer/]

Russia’s invasion of Ukraine threatens to spark a global food crisis, as simultaneous disruptions to harvests and global fertilizer production are driving up food prices and sending economic shock waves throughout the world.

After a month of war, economists and aid agencies say the world is facing merging crises that could rapidly spiral into a global food emergency. The conflict has already slashed Russian and Ukrainian exports of crucial commodities such as wheat, sunflower oil, and corn, a disturbance that has rippled across import-reliant countries in the Middle East and North Africa. At the same time, the ongoing energy crunch has drastically increased fertilizer prices and transportation costs, squeezing the key inputs for global agricultural production.

These disruptions have converged in a “perfect storm,” said Ertharin Cousin, a distinguished fellow at the Chicago Council on Global Affairs and former executive director of the World Food Program. “That could result in a cataclysmic spike in food prices.”

Together, Russia and Ukraine account for roughly 30 percent of global wheat exports, while Russia is the world’s top fertilizer exporter. Both fertilizer and food prices have already climbed to record levels as the war impedes shipments and Western sanctions hit Russia. In the early weeks of the conflict, Kyiv also banned exports of wheat and other key food staples, while Moscow urged its fertilizer producers to temporarily suspend exports.

In the coming months, the United Nations’ Food and Agriculture Organization estimates that food prices could surge by as much as 20 percent, a significant spike that could exacerbate global food insecurity. Nearly 283 million people in 81 countries currently face acute food insecurity or are at high risk, according to the World Food Program, with 45 million on the brink of famine.

Russia’s invasion could be a “tipping point” into a world hunger crisis, Cousin said: “The entire global community will be hard hit by this.”

Rising food prices could also fuel political instability in import-reliant countries. Food prices and political unrest have historically been correlated with one another: A decade ago, skyrocketing grain costs—which drove bread prices up by 37 percent in Egypt—contributed to the Arab Spring. Earlier in 2008, spiraling prices spurred global riots and protests.

“People will react when they’re hungry … when the cost of food goes so high that they can’t afford the rent,” said Catherine Bertini, a distinguished fellow at the Chicago Council and also a former executive director of the World Food Program.

Surging prices have already sparked unrest in countries like Sudan, which imports more than 80 percent of its wheat from Russia and Ukraine. As bread prices rose, thousands of Sudanese demonstrators faced tear gas and bullets to protest. In recent weeks, protests have also rocked Iraq and Greece, where hundreds of farmers demonstrated against soaring fertilizer prices.

If these economic shocks continue, the instability could spread to other regions around the world, said Michael Tanchum, an energy expert at the European Council on Foreign Relations and the Middle East Institute. “This time around, it won’t be just an Arab Spring, it won’t be just North Africa, if measures aren’t taken,” Tanchum said.

Since global food markets were already strained by the COVID-19 pandemic, economists say the war’s economic fallout has been particularly painful—and especially so for nations that are heavily dependent on Russia and Ukraine’s supply. Almost 50 countries rely on Russia and Ukraine for at least 30 percent of their wheat imports, and 26 depend on them for more than half of their imports.

“This is compounding an already bad situation,” said Chris Barrett, an agricultural economist at Cornell University. “The real worry right now is that the perfect storm comes as we still are not out of the woods from all of the massive economic displacement caused by the pandemic.”

The ongoing energy crunch has only intensified these pressures as skyrocketing natural gas prices drive up the costs of fertilizer production. Natural gas is required to make both ammonia and urea, key components in nitrogen-based fertilizers. To cope with these increased costs, some producers have resorted to slashing production. In March, fertilizer giant Yara International announced that it would have to operate at about half capacity in Europe to accommodate rising prices and planned maintenance.

A shock of “this magnitude has not been experienced before,” said Svein Tore Holsether, the CEO of Yara, who noted that roughly 80 percent of the cost of making nitrogen-based fertilizer comes from energy. “What we’re experiencing now are complete shutdowns of parts of the value chain.”

This disruption has strained countries like Brazil, which relies on Russia for over one-fifth of its fertilizer imports. Faced with a shrinking supply, Brazil, Argentina, Bolivia, Chile, Paraguay, and Uruguay pleaded to exclude fertilizer from Western sanctions on Russia in March. “Brazil depends on fertilizers,” Brazilian President Jair Bolsonaro told reporters. “It’s a sacred question for us.”

As the cutbacks and shortages bleed into the next planting season, experts warn that its impacts will be felt for months to come—and across a wide range of crops.

This fertilizer crunch “is going to impact every production in the world,” said David Laborde, a senior research fellow at the International Food Policy Research Institute. “It’s not just wheat.”

Aid agencies are now scrambling to secure sufficient funding to support the world’s most at-risk populations. Meeting the global need, however, may be challenging: In March, the World Food Program announced that it would need to raise an additional $71 million per month to purchase enough food. But as its resources are stretched by the war, the agency said, it has also been forced to reduce rations for refugees in the Middle East and Africa.

“We have no choice but to take food from the hungry to feed the starving,” David Beasley, the executive director of the World Food Program, said in a statement.

“The Russian attack on Ukraine was an attack on food insecure people everywhere in the world,” said Barrett, the agricultural economist. In the worst-case scenario, he said, “we are going to see tens of millions of people suddenly facing famine.”

### -xt Shortages Locked in

#### Ukraine guarantees global food shortages.

Puma '3/1 - director of the Center for Climate Systems Research at Columbia University’s Climate School [Michael J and Megan Konar, 3/1/22, "What the War in Ukraine Means for the World’s Food Supply," https://www.nytimes.com/2022/03/01/opinion/what-the-war-in-ukraine-means-for-the-worlds-food-supply.html]

As we watch Ukrainian refugees arrive by car and foot in Poland, it’s hard not to recall World War II, when the region was ravaged by fighting, famine spread and millions of Ukrainians died of starvation.

We’re nowhere near that point; this time, however, food disruptions won’t remain an insular crisis. What is happening in Ukraine now already is radiating outward and threatening food availability in less prosperous nations that have come to depend on exports of grains and other food products from Ukraine and Russia.

The Black Sea region today is a vital hub of global agricultural production and trade, and Ukraine is one of the world’s breadbaskets. After the breakup of the Soviet Union, Ukraine and Russia were net grain importers. Now the two countries account for 29 percent of global exports of wheat. They also contribute 19 percent of global corn and 80 percent of global sunflower oil exports.

After only days of fighting, global commodity markets have been roiled. Shipping in the Sea of Azov was brought to a standstill last week. Wheat futures jumped 12 percent on the Chicago Board of Trade. This increase topped already inflated prices.

Staple grains supply the bulk of the diet for the world’s poorest. Higher prices threaten to place a significant strain on poor countries like Bangladesh, Sudan and Pakistan, which in 2020 received roughly half or more of their wheat from Russia or Ukraine, as well as Egypt and Turkey, which imported the great majority of their wheat from those combatants. Nations in the Middle East and North Africa saw food prices spike in 2010 when Ukraine restricted its exports of wheat, squeezing what had been consistent supplies of food to those countries and contributing to political instability throughout the region.

Pandemic-related supply chain disruptions have already inflated prices for food and other basic staples. Many low-income food-importing countries have also seen an increase in malnourishment rates.

To make matters worse, Russia and Belarus, a staging ground for the invasion and close ally of Russia, are also major exporters of fertilizer, with Russia leading the world; prices, which were at historically high levels before the war, have spiked. Fertilizer scarcity jeopardizes global crop production at a time when some or all of the 13 percent of global corn and 12 percent of global wheat exports from Ukraine could be lost.

The United Nations’ World Food Program warned in November that the world is facing “catastrophic hunger” for hundreds of millions of people as the humanitarian organization struggles financially to provide help to troubled nations. This is especially true in Afghanistan, where famine looms for millions.

“Fuel costs are up, food prices are soaring, fertilizer is more expensive, and all of this feeds into new crises,” the program’s executive director, David Beasley, said at the time.

Now Russia’s invasion of Ukraine has significantly exacerbated those problems, threatening the security of countries already struggling to feed their populations.

### --xt No Food Wars

#### No ag impact

Steven **Pinker 11**, Prof @ Harvard, Steven Pinker: Resource Scarcity Doesn’t Cause Wars, <http://www.globalwarming.org/2011/11/28/steven-pinker-resource-scarcity-doesnt-cause-wars/>

Once again it seems to me that the appropriate response is “maybe, but maybe not.” Though climate change can cause plenty of misery… it will not necessarily lead to armed conflict. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources. Hunger and resource shortages are tragically common in sub-Saharan countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause local skirmishes, but a genuine war requires that hostile forces be organized and armed, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers. As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing. In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries rather than cherry-picking one or toe, he concluded, “Those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support from the large-N literature.”

## AT: Leadership Advantage

### 1NC - NATO Bad

#### NATO is ineffective and risks a European war with Russia

Jenkins 2018 - Guardian columnist   
Simon, "Donald Trump is right. Nato is a costly white elephant," Jun 12, https://www.theguardian.com/commentisfree/2018/jul/12/donald-trump-nato-costly-white-elephant-russia

Donald Trump is a pig, a liar, a woman-hater, a racist, a monster of bombast – and did I mention a disrupter and total bastard as well? Does that feel better? Comment on the current US president seems to require a wallow in the pit of competitive contempt. But it just plays his game.

I regard Trump as an aberration, a temporary trauma afflicting US politics. He honours the thesis of the historian Arthur Schlesinger, that America’s constitution often drives the republic to the abyss, only to drag it back again. But even monsters can ask the occasional good question. Thus Trump this week on Nato, a body so mired in platitude and waffle it has lost sight of its true purpose. Trump wants to know what Europe really regards as its defence policy, for he thinks it takes America for a ride. Nato was founded in 1949 in response to Stalin’s blockade of Berlin. It was meant to “keep the Soviet Union out, the Americans in, and the Germans down”. Since then, it has welcomed the American nuclear shield, at vast cost to America. Otherwise, its only military achievements have been the breakup of Yugoslavia and the loss of a squalid 17-year war in Afghanistan. Neither has anything to do with the North Atlantic. Nothing better symbolised this than Theresa May’s bizarre gift to Trump this week of 450 British troops for Kabul.

It is astonishing that, three decades after 1989, Europe is almost back to a cold war with Moscow. As winner of the last war, Nato was primarily responsible for lowering tension and making peace. Instead it revelled in victory. If Europe wants to hire an America nuclear shield, it should deal with America over how to pay for it. But the current tit-for-tat hostilities with Russia are playing with fire, and counterproductive. Europe’s land forces are so weak they would be wiped out by Russia in a matter of days. So is Europe really expecting Washington to order a nuclear barrage against Russian “grey area” incursions into the Baltics, let alone a conflict with Orbán’s Hungary or Erdoğan’s Turkey – both Nato members?

This is not realistic, any more than was American intervention during Russia’s incursion in Ukraine or Georgia. That is why Orbán and Erdoğan are wisely cosying up to Putin. Nato is adrift of realpolitik.

Trump is effectively telling Europe that its Nato is as outdated as the Congress of Vienna by the time of Bismarck. He is wrong to rabbit on about spending 2% or 4% of GDP on weapons. This helps no one but the defence industries – spending should meet plausible threat, not some vague budget target. But no more helpful is Europe’s belligerent posturing towards Moscow, such as Britain’s reaction to the mysterious Wiltshire poisonings. Entrenching Putin behind a siege economy is not a defence policy.

Better to go down the route of detente, recognise Russia’s sphere of influence and be just a little nicer to Putin. Whatever Trump’s motives for advocating this, he is surely right. A sensible Nato would have a firefighting force to handle separatist and frontier squabbles such as Kosovo, not a main force conflict with Russia.

#### NATO is useless and causes a moral hazard – best for the US to exit

Whiton 2018 - Senior Fellow @ the Center for the National Interest   
Christian, "NATO Is Obsolete," Jul 6, https://nationalinterest.org/feature/nato-obsolete-25167?page=0%2C1

After the alliance was established in 1949, its first secretary general, Lord Hastings Ismay, summed up its purpose concisely: “to keep the Russians out, the Americans in, and the Germans down.” The unofficial mission matched the time well: Western Europe’s postwar future was clouded by the prospect of a Soviet invasion, American insularity, or German militarism—all possible given the preceding decades of history.

Nearly seventy years later, none of these concerns still exist. Furthermore, NATO's opposing alliance during the Cold War, the Warsaw Pact, quit the Soviet Bloc in 1989, and the Soviet Union itself passed into history in 1991—twenty-seven years ago.

Despite endless searches for a new mission to justify its massive burden on U.S. taxpayers, NATO has failed to be of much use since then. As its boosters like to remind us, after 9/11, the alliance invoked its Article 5 mutual-defense provision on our behalf. But action from America’s allies did not follow the grandiose gesture—the NATO mission in Afghanistan relied mostly on U.S. forces and effectively failed.

Today, the alliance’s bureaucrats and some member states spotlight a threat from Russia as a reason for keeping the organization alive, along with a laundry list of “train and equip” missions.

Yet NATO members' defense budgets don't reflect a real sense of danger from Russia or anyone else. Among the twenty-nine members, only the United States is really serious about its Article 3 obligations to defend itself, spending approximately $700 billion or 3.5 percent of its GDP on defense. No other NATO member comes close to this proportion, and the vast majority fail even to meet the modest, self-imposed requirement to devote at least 2 percent of GDP to defense.

Britain and Poland are rare members that meet the 2 percent requirement. One of the worst free-riders is Canada, which spends just 1 percent of its GDP on security, amounting to $20 billion. Furthermore, Germany spends a similarly pathetic 1.2 percent.

Compare that to non-NATO members facing real threats, some of which spend 5-10 percent of their GDPs on defense. These include Saudi Arabia and the United Arab Emirates, who must contend with Iran and spend nearly a combined $100 billion. Israel, which faces the same enemy, adds $15 billion to the equation.

Despite protestations of poverty at a time when their economies have never been larger, NATO members are more than willing to rack up additional liabilities, knowing America has their back. Last year, the alliance welcomed Montenegro. It is now poised to admit the Former Yugoslav Republic of Macedonia, which would mean the United States is pledged to defend a nation that devotes just $120 million per year to its own defense, not quite as much as the Cincinnati Police Department.

But the reality is there is no truly capable Russian foe seriously threatening the West. Russia has one million uniformed personnel in its military, the world’s second-largest behind America, but the European Union could easily afford to match that with its combined $17 trillion economy—ten times larger than Russia’s. However, it needn’t bother as Moscow spends just $61 billion on its overwrought military, which doubles as an employment program.

Russia’s Vladimir Putin has gotten the most from Russia’s military, occupying parts of Georgia and Ukraine and gaining influence in Syria by backing the Assad regime. Still, his success in all three cases rested heavily on surprises that Moscow seems unlikely to be able to repeat against prepared and adequately funded European militaries.

Yer we should expect to hear none of this nuance at the NATO summit, as poohbahs of the dying old European political order gather to tut-tut President Trump in the alliance’s fancy new $1.4 billion headquarters, funded predominantly by American taxpayers.

To get out of this abusive relationship, Trump should begin the process of limiting America's role in NATO. A good model is that of Sweden, which cooperates with NATO on some matters and not on others. Such an approach could allow joint training, but end the practice of having over-burdened U.S. taxpayers foot the bill for wealthy Europeans' security. As part of this plan, Trump could mothball U.S. bases in Europe and shift most resources spent there and in the Atlantic to the Indo-Pacific region, where China and Iran pose real threats to America—and against which NATO is irrelevant.

Europe is prosperous and treats America like a patsy. Let it stand on its own.

### 1NC/2AC – AT: War

#### Diplomacy, internationalism, globalization, and deterrence mean no chance of war.

Thorton '22 - Senior Fellow at the Paul Tsai China Center at Yale Law School [Susan, 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]

John Mearsheimer’s article engenders a sense of foreboding and doom. “Engagement may have been the worst strategic blunder any country has made in recent history,” he writes. As a result, “China and the United States are locked in what can only be called a new cold war. . . . And this cold war is more likely to turn hot.”

I cannot agree that the U.S. policy of engaging China was a major strategic blunder. During the Cold War, that policy succeeded at convincing China to stop sponsoring communist revolutions in East Asia and helped counter the Soviet Union. After the Cold War ended, engagement enabled massive economic growth in China that lifted hundreds of millions of Chinese out of poverty—a significant reason that the share of people worldwide living in extreme poverty, by the World Bank’s definition, fell from 36 percent in 1990 to 12 percent in 2015. Surely, this counts as a major human achievement.

What would be a strategic blunder, however, is whatever series of missteps might lead to a military conflict between China and the United States. Mearsheimer argues that structural factors are inexorably leading to such a conflict. But his realist view of the situation disregards modern international realities.

There are a number of formidable restraints in place to keep the peace. The United States has worked hard over the decades to build these barriers—often as part of the very engagement strategy that Mearsheimer criticizes. These bulwarks have helped preserve peace and promote prosperity for the last 70 years, and they are still strong enough to prevent a U.S.-Chinese conflict. Although accidents or incidents connected to military brinkmanship may occur, they would almost certainly not lead to a wider war. That would require something exceedingly unlikely: the simultaneous failure of every restraint.

First, bilateral diplomacy would have to break down. Engagement is the opposite of estrangement, which describes the absence of U.S.-Chinese relations from 1949 to 1972. The purpose of engagement is to forestall misperceptions, provide reassurance, and prevent conflict. It is true that diplomacy and communication between China and the United States have been anemic for the past five years. And it is difficult to discern authoritative policy amid the current cacophony of diplomatic posturing on Twitter and elsewhere, creating an environment ripe for confusion and overreaction. But these deficiencies are not structural; they can be remedied. If top-level leaders in both countries consistently communicate and work to reduce public posturing, as they should, then the diplomatic barriers to war can be reinforced.

For a war to break out, the international system would also have to fail. China and the United States are connected to a global network of countries and institutions that have a stake—in some cases, an existential stake—in preventing conflict between these two countries. Almost every government and institution on the globe would be grievously damaged by a U.S.-Chinese war, and so they all would try to prevent an imminent conflict through diplomatic pressure, mediation, or acts of resistance, such as denying overflight and basing rights. Critics may be quick to deny the influence of others in heading off a major-power clash. But in the current international system, there is no way for either side to emerge victorious, and those outside China and the United States would see this most clearly.

Then there is the restraint created by globalization. Mearsheimer argues that it was a catastrophic mistake for the United States to help China grow wealthy, as its resulting strength will inevitably lead it to challenge the United States. But it is also plausible that the inextricably integrated nature of the global economy, and specifically of the Chinese and U.S. economies, makes any war unwinnable and thus acts as a deterrent to conflict. It is true, as critics will point out, that economic dependencies failed to prevent World War I. But the economic relations of the early twentieth century were nothing like the complex entanglements of today’s international economic system. In the case of China and the United States, they create a situation of mutual assured economic destruction.

Another restraint is public opinion, at least on the U.S. side. Politicians in the United States respond to various incentives, but they cannot ignore the sentiments of their voters. And after a 20-year fight against terrorism, the American public is decidedly wary of protracted and costly overseas conflicts. If U.S. policymakers appeared poised for a conflict with China, one would also expect that the press, having learned its lesson from the war in Iraq, would perform its watchdog function, question the official narratives, and activate public concern.

All these barriers should work to prevent a conflict. But if they somehow didn’t, there is a final fail-safe that is even harder to imagine not working: military deterrence. Taiwan is the most likely issue over which a U.S.-Chinese war could break out. But the quantity and quality of the weaponry on both sides translates to certain catastrophic losses for all, which should provide a sufficient deterrent to war. And because the devastation of a conflict over Taiwan would spiral out of control quickly, one cannot rule out the use of nuclear weapons. Strange as it may sound, that is good news: just as the nuclear age prevented direct military conflict between the Soviet Union and the United States for more than 40 years, so it should between China and the United States, both of which are nuclear-armed powers with survivable second-strike capabilities. Although China has many fewer missiles and warheads than the United States—something China is working on remedying—the doctrine of mutually assured destruction still operates. The balance of terror holds.

Looking through this list of potential failures, one might find cause for pessimism, given that each restraint has seen its share of erosion in recent years. But China and the United States are not prisoners of history. The two countries will find that they cannot escape one another, and eventually, they will have to seek accommodation. This may now seem a distant vision, but it is a far more likely outcome, given the countervailing currents, than an apocalyptic war.

### 1NC – Peaceful rise

#### China’s rise is peaceful and they won’t displace the US.

Nathan '22 - Class of 1919 Professor of Political Science at Columbia University [Andrew, 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 country’s geographic position is also unfavorable. Along its land and sea borders, China confronts distrustful neighbors. Among them are seven of the 15 most populous countries in the world (India, Indonesia, Japan, Pakistan, the Philippines, Russia, and Vietnam) and five countries with which China has fought wars within the past 80 years (India, Japan, Russia, South Korea, and Vietnam). None of China’s neighbors is culturally Chinese or ideologically aligned with the Chinese Communist Party. All may cooperate with China at various times and to varying degrees for strategic or economic reasons, but all seek to hedge against Chinese domination, often by cultivating relations with the United States. As Chinese behavior has become more assertive, this counterbalancing behavior is growing more evident. India has compromised its traditional strategic autonomy in order to participate in joint military exercises with Australia, Japan, and the United States as part of the Quadrilateral Security Dialogue, known as the Quad. Japan has taken the unprecedented step of officially declaring stability in the Taiwan Strait to be a national interest. And Australia has reaffirmed its U.S. alliance by accepting help in acquiring nuclear-powered submarines under the 2021 AUKUS agreement. China is unlikely to achieve anything like hegemony over any but the smallest of its neighbors.

Geography helps explain another Chinese weakness: its lack of allies other than North Korea. There are countries that are nearby enough to receive substantial help from China in the case of a military conflict, but they all fear China more than they fear any other state. The lack of allies is more a liability than an asset, for it deprives China of ways to multiply the pressure it can put on uncooperative neighbors and of the ability to position sizable military forces around the world. To be sure, none of the United States’ 60-some allies and partners has interests identical to Washington’s. None can be counted on to follow every component of U.S. strategy toward China. But U.S. alliances and partnerships still complicate China’s military calculations, increase the pressure on Beijing to comply with the international norms preferred by other states, and expand the alternatives available to countries considering whether to accept Chinese investments.

Nor is the structural distribution of international power favorable to Chinese global dominance. Barring catastrophic mismanagement by other states, China will continue to face five powerful rivals—India, Japan, Russia, the United States, and the European Union—in a multipolar system that is not going to disappear. A unipolar moment, if one ever really existed, cannot be re-created, not by the United States and certainly not by China.

THREAT PERCEPTION

The challenge the United States faces from China is bad enough without exaggerating it. As realism would predict, Beijing is dissatisfied with the status quo: it is closely hemmed in by Washington’s allies, partners, and military forces; its supply lines are vulnerable to U.S. interdiction; and its society is influenced by American culture. China wants to push the United States away from its shores and weaken its alliances, and this means a real chance of conflict, especially over Taiwan. I agree with Mearsheimer that if such a war occurred, it would probably be a limited war, albeit highly destructive and tragic. I also agree that it would have the potential—not a great one, but more than zero—to escalate to a nuclear exchange.

But Mearsheimer is wrong to describe China’s determination to gain control over Taiwan as either “emotional” or “expansionist,” because these descriptors make China sound irrationally aggressive. Mearsheimer’s own theory of realism better explains why Beijing will not lose its appetite for Taiwan, given the long-standing legal basis of its sovereignty claim and the island’s strategic, economic, and technological importance to Chinese security. Also consistent with realism is China’s preference for avoiding a premature strike on Taiwan and instead deterring Taiwanese independence as long as it takes to achieve what Beijing calls “peaceful reunification.” But deterring Taiwanese independence has meant that China has had to build up military assets capable of threatening the aircraft carriers and forward air and naval bases that the United States has long relied on to stave off any attempt to take Taiwan by force. The result: a U.S.-Chinese arms race that raises the risk of war through miscalculation.

And Mearsheimer is wrong to describe Beijing’s goal as global dominance. In a multipolar world, China will seek to shape global institutions to its advantage, just as major powers have always done. But it has no proposal for an alternative, Beijing-dominated set of institutions. It remains strongly committed to the global free-trade regime, as well as to the UN and that organization’s alphabet soup of agencies. It participates actively in the UN human rights system in order to help its allies and frustrate its rivals. Its Belt and Road Initiative operates alongside, rather than in place of, long-standing Western-funded development programs. China seeks influence, but it has little prospect of dominance as long as other powers also stay active in these institutions.

Overestimating the China threat is just as dangerous as underestimating it. Hyping the hazard makes it harder to manage, by creating panic among both the American public and Chinese policymakers. Whether or not engagement was the mistake that Mearsheimer claims, whether or not there was ever an option to constrain China’s growth as he believes, we are where we are. I agree with Mearsheimer that what the United States must do now is manage the situation—which should mean not exacerbating what is already, on cold realist grounds, a serious challenge.

### AT: Taiwan war

#### The 1AC is neocon rhetoric aimed at making a mountain out of a molehill. China won’t attack Taiwan.

Cohen '21 [Michael, 11/19/2021, "No, Neocons, China Is Not About to Invade Taiwan," https://newrepublic.com/article/164485/why-china-will-not-invade-taiwan]

One big reason is that Taiwan is about as inhospitable an environment as can be imagined for an amphibious invasion. Ian Easton, a defense expert who has written extensively about Taiwan defense strategy, wrote earlier this year that the country’s “coastal terrain … is a defender’s dream come true. Taiwan has only 14 small invasion beaches, and they are bordered by cliffs and urban jungles.” Easton also notes that “many of Taiwan’s outer islands bristle with missiles, rockets, and artillery guns. Their granite hills have been honeycombed with tunnels and bunker systems.”

A Chinese invasion of Taiwan would look more like the World War II Marine assaults on the rough and unforgiving terrain of Pacific islands than it would D-Day (which was no walk in the park, either) but against an exponentially more competent and technologically advanced military. Even if somehow China were successful in invading Taiwan and occupying the island, it would then find itself in the position of having to pacify and potentially rebuild an advanced nation of 23 million people (two million of whom are members of the nation’s military reserves).

Putting aside the virtually insurmountable military obstacles, there’s the larger issue of how the U.S. and other nations in the region would respond (in recent weeks, Japanese leaders have made clear their determination to help Taiwan in the wake of Chinese invasion). The U.S. could play a decisive role, even without boots on the ground in Taiwan. For example, American naval and air forces could wreak havoc on Chinese supply lines.

As Rachel Esplin Odell and Eric Heginbotham wrote recently in Foreign Affairs (in response to Skylar Mastro): “To seize control of the island, China would need to keep its fleet off Taiwan’s coast for weeks, creating easy targets for antiship cruise missiles launched from Taiwan or from U.S. bombers, fighter aircraft, and submarines.”

Ultimately, no one knows what the U.S. would do in response to a Chinese attack. In recent months, President Biden has twice publicly stated that the U.S. will defend Taiwan, which rhetorically goes so beyond the long-held policy of “strategic ambiguity” that the White House has been forced to walk back his comments. But even if Biden got too far out on his skis, his misstatements create even further confusion for China about U.S. intentions.

Those who are argue that China could invade Taiwan are assuming that Beijing would willingly initiate a conflict that could lead, potentially, to the involvement of the world’s strongest military, backed by thousands of nuclear weapons. Such assumptions throw the entire notion of deterrence on its head.

Lastly, there are the political and financial costs. If China were to attack Taiwan, it would require the mobilization of millions of its citizens and billions, or even trillions, in spending simply to prepare for war. Success would bring with it an even larger price tag for rebuilding Taiwan and integrating the island into China. Anything other than complete military success and acquiescence by the international community would reap an ill wind for Chinese leaders. Economic isolation; interruption of trade ties that have been essential to China’s economic growth over the past two decades; and a generation, if not more, of mistrust and hostility from the U.S., China’s Asian neighbors, and likely the international community would almost certainly be the result.

A Chinese invasion of Taiwan that was anything but a success would likely leave the nation politically isolated, economically damaged, and reputationally crippled. And ironically, a failed attack could lead to a Taiwanese declaration of independence—one that China would be incapable of stopping. All that, at a time when the Chinese economy is facing a collection of economic headwinds—from an energy crunch and a growing real estate crisis to slowing economic growth.

There are other force options available to China’s leaders. The aforementioned Pentagon report notes the potential for an “Air and Maritime Blockade,” “Limited Force or Coercive Options,” and an “Air and Missile Campaign.” But all of these bring with them similar negative political and economic consequences. China could also ramp up the military provocations that have been increasing since 2020, moves that have included Chinese aircraft repeatedly violating Taiwan’s Air Defense Identification Zone and have refuted the existence of a so-called “median line” in the Taiwan Strait. But these moves should be seen in more straightforward terms: an effort to deter Taiwan from taking further steps toward declaring independence.

Those warning of a Chinese invasion would be wise to consider Xi Jingping’s most recent statements about Taiwan. In Beijing’s readout of the meeting this week between Biden and Xi, it states, in regard to Taiwan, “We have patience and will strive for the prospect of peaceful reunification with utmost sincerity and efforts.”

At the same time, the statement makes clear, “Should the separatist forces for Taiwan independence provoke us, force our hands, or even cross the red line, we will be compelled to take resolute measures.”

As M. Taylor Fravel, a professor of political science and director of the Security Studies Program at the Massachusetts Institute of Technology, notes, this is consistent with Beijing’s long-standing political-military strategy for Taiwan. “In the simplest terms,” says Fravel, China “seeks to deter Taiwan from declaring independence (and perhaps the U.S. from supporting it), and use military threats toward this end, but not compel unification by force. Military power and interdependence are part of the equation, but they are not the core of the policy that China is now pursuing.” In Fravel’s view, not only are the costs of invading Taiwan high, it’s not Beijing’s “preferred approach for achieving unification.” After all, Fravel notes, “the people of Taiwan are described as ‘compatriots’ and not enemies.”

The U.S. can play a useful role in maintaining the ambiguous status quo. Since 1979, the U.S. has adhered to a “one China” policy, which views Beijing as the sole legitimate government of China. The U.S. would do well to make clear that this policy remains in place, while at the same time maintaining its position of “strategic ambiguity” and discouraging any provocative moves by Taiwan toward independence.

But above all, the Biden administration needs to ignore the alarmist rhetoric of those warning that a Chinese invasion is imminent or even reading too much into China’s provocations. Even if it wanted to, China is not about to invade Taiwan.

### \*\*Heg Bad\*\*

### 1NC – Collapse Peaceful

#### Hegemonic decline will be peaceful

MacDonald 2018 - Associate Professor of Political Science @ Wellesley College  
Paul K and Joseph M. Parent, *Twilight of the Titans: Great Power Decline and Retrenchment*, Cornell U Press, p. 2-3

In this book, we argue that the conventional wisdom is wrong. Specifically, we make three main arguments. First, relative decline causes prompt, proportionate retrenchment because states seek strategic solvency. The international system is a competitive place, and great powers did not get to the top by being imprudent, irrational, or irresponsible. When their fortunes ebb, states tend to retain the virtues that made them great. In the face of decline, great powers have a good sense of their relative capability and tend not to give away more than they must. Expanding or maintaining grand strategic ambitions during decline incurs unsustainable burdens and incites unwinnable fights, so the faster states fall, the more they retrench. Great powers may choose to retrench in other circumstances as well, but they have an overriding incentive to do so when confronted by relative decline.

Second, the depth of relative decline shapes not only how much a state retrenches, but also which policies it adopts. The world is complex and cutthroat; leaders cannot glibly pull a policy off the shelf and expect desired outcomes. Because international politics is a self-help system, great powers prefer policies that rely less on the actions of allies and adversaries. For lack of a better term, we refer to these as domestic policies, which include reducing spending, restructuring forces, and reforming institutions—all to reallocate resources for more efficient uses. But international policies may also help, and they include redeploying forces, defusing flashpoints, and redistributing burdens—all to avoid costly confl icts and reinforce core strongpoints. The faster and deeper states fall, the more they are willing to rely on others to cushion their fall. Retrenchment is not a weapon but an arsenal that can be used in different amounts and combinations depending on conditions and the enemies faced.

Third, after depth, structural conditions are the most important factors shaping how great powers respond to relative decline. Four conditions catalyze the incentives for declining states to retrench. One is the declining state’s rank. States in the top rungs of the great power hierarchy have more resources and margin for error than those lower down, so there is less urgency for them to retrench. Another is the availability of allies. Where states can shift burdens to capable regional powers with similar preferences, retrenchment is less risky and diffi cult. Yet another is the interdependence of commitments. When states perceive commitments in one place as tightly linked to commitments elsewhere, pulling back becomes harder and less likely. The last catalyst is the calculus of conquest. If aggression pays, then retrenchment does not, and great powers will be loath to do it. The world is not just complex and cutthroat, it is also dynamic. No set of conditions is everlasting, and leaders must change with the times.

Empirically, this work aims to add value by being the fi rst to study systematically all modern shifts in the great power pecking order. We fi nd sixteen cases of relative decline since 1870, when reliable data for the great powers become available, and compare them to their non-declining counterparts across a variety of measures. To preview the fi ndings, retrenchment is by far the most common response to relative decline, and declining powers behave differently from non-declining powers. States in decline are more likely to cut the size of their military forces and budgets and in extreme cases are more likely to form alliances. This does not, however, make them ripe for exploitation; declining states perform comparatively well in militarized disputes. Our headline finding, however, is that states that retrench recover their prior rank with some regularity, but those that fail to retrench never do. These results challenge theories of grand strategy and war, offer guidance to policymakers, and indicate overlooked paths to peace.

### --xt Cognitive Dissonance

#### Decline will be slow and peaceful – all of their impact claims are rooted in cognitive dissonance

Fettweis 2018 - Associate Professor of Political Science at Tulane University   
Christopher J, *Psychology of a Superpower: Security and Dominance in U.S. Foreign Policy,* Columbia University Press, p.172-173

Not all declines have gone so smoothly for the people who experienced them, of course. Sudden and sharp collapses, whether accompanied by marauding Goths and Vandals or not, are usually unpleasant experiences. The Soviet empire collapsed all at once, as did those of the Habsburgs and Ottomans, which led to instability, economic stagnation, and violence. No such rapid collapse is likely in the United States' future, however. Even the most inveterate pessimists do not envision a sudden reversal of fortunes and end of the unipolar system. All declinists predict a gradual, if inevitable, relative weakening, largely as the result of rising wealth and power elsewhere.38 The American experience is much more likely to resemble the gradual, graceful decline of Spain or Great Britain than the catastrophic collapse of Rome or the Soviets. And some scholars have even proposed that Chinese leadership would be accompanied by a greater degree of international stability, given Beijing's general disinterest in promoting revolutionary democratic change.39

The end of unipolarity will have positive aspects as well. Perception is likely to improve in Washington, for one thing, at least in certain areas. Researchers have found that the kind of overconfident self-assessments that impoverish the decision making of unipolar powers can be diminished if power is reduced.40 Once their dominance ends, over time the U.S. public might come to perceive the world in a more accurate way and craft better policies to deal with it. Or at least one can hope.

The unipolar order will end slowly, quietly, even imperceptibly, striking a blow to the U.S. ego, perhaps, but not its interest. When modern great powers fade, they tend to do it in ways that leave the people no worse off-and sometimes far better-than they were at the height of empire. To the extent that unipolarity contributes to pathological misperceptions, its end, whenever it arrives, may well improve the strategic thinking in the United States.

Most people devote little time to the finer points of grand strategy, however, and images of decline can create quite negative emotions. Accusations that Washington is allowing the United States to become less great somehow are powerful political tools. Individuals live vicariously through the exploits of their nation. When their country loses, they too are losers; when something good happens, they bask in reflected glory. The benefits of unipolarity are not merely-or even mostlyconfined to tangible increases in security. There is little evidence to support the belief, no matter how widely held, that the United States is safer in a world it dominates. A large part of the reason why so many Americans reflexively support their status is emotional and somewhat irrational: They simply enjoy being the best, the greatest, the numberone country in the world. They like to feel like winners.

### --xt Decline Peaceful

#### Hegemonic decline will be peaceful

Fettweis 2017 - Associate Professor of Political Science at Tulane University   
Christopher, "Unipolarity, Hegemony, and the New Peace," Security Studies, 26:3, 423-451, DOI: 10.1080/09636412.2017.1306394

Why has armed conflict declined to historically low levels? What accounts for the post-Cold War peace, and how long is it likely to last? Surely no questions are more important for either the theory or practice of international relations, and few are harder to answer. Only by understanding the causes of the New Peace can we extrapolate its likely future, however, and plan accordingly. Of the many possible independent variables, none is more controversial than the suggestion that hegemonic stability is at work. The possibility that the United States, wittingly or not, has essentially established a global Pax Americana is generally overlooked by the major scholarly works on the subject. This stands in stark contrast to the policy world, where the many positive aspects of unipolarity and/or US hegemony are articles of faith, rarely discussed and never seriously questioned. Scholar and public intellectual Michael Lind spoke for many when he wrote, “in my experience, most members of the U.S. foreign policy elite sincerely believe that the alternative to perpetual U.S. world domination is chaos and war.” 4 One of those is certainly Robert Kagan, who noted, “Pinker traces the beginning of a long-term decline in deaths from war to 1945, which just happens to be birthdate of the American world order. The coincidence eludes him, but it need not elude us.”5

This paper examines the theoretical, empirical, and psychological foundations of that widespread belief. The first section discusses the New Peace and its potential explanations; the second explains the difference between unipolarity and hegemony, and examines the logic of the hegemonic-stability argument; the third turns to the evidence, comparing both US power and grand strategy to conflict levels; the fourth examines the political psychology of hegemony and reviews some major findings that provide insight into how international order can be misperceived. Insights from that field are crucial in any discussion of the relationship between US power and global stability, which is built far more on belief and perception than evidence.

The New Peace does not appear to be the result of unipolarity or US hegemony. While that conclusion might not sit well with many US analysts, the news is not all bad, for if the current generation of declinists is right and unipolarity’s days are numbered, the odds are good that the world will not descend into the atavistic chaos that haunts the neoconservative imagination. The United States can adjust its grand strategy without fear in the Trump years, perhaps even letting the “unipolar moment” expire, because the New Peace may well be unrelated to its dominance.6

### 1NC– Decline Inevitable

#### The failure of US leadership and Trumpism makes hegemonic decline inevitable

Posen 2018 - Ford International Prof of Political Science and Director of the Security Studies @ MIT  
Barry, "The Rise of Illiberal Hegemony: Trump's Surprising Grand Strategy," 97 Foreign Aff. 20 (2018)

Hegemony is always difficult to achieve, because most states jealously guard their sovereignty and resist being told what to do. But since the end of the Cold War, the U.S. foreign policy elite has reached the consensus that liberal hegemony is different. This type of dominance, they argue, is, with the right combination of hard and soft power, both achievable and sustainable. International security and economic institutions, free trade, human rights, and the spread of democracy are not only values in their own right, the logic goes; they also serve to lure others to the cause. If realized, these goals would do more than legitimate the project of a U.S.-led liberal world order; they would produce a world so consonant with U.S. values and interests that the United States would not even need to work that hard to ensure its security.

Trump has abandoned this well-worn path. He has denigrated international economic institutions, such as the World Trade Organization, which make nice scapegoats for the disruptive economic changes that have energized his political base. He has abandoned the Paris climate agreement, partly because he says it disadvantages the United States economically. Not confident that Washington can sufficiently dominate international institutions to ensure its interests, the president has withdrawn from the Trans-Pacific Partnership, launched a combative renegotiation of the North American Free Trade Agreement, and let the Transatlantic Trade and Investment Partnership wither on the vine. In lieu of such agreements, Trump has declared a preference for bilateral trade arrangements, which he contends are easier to audit and enforce.

Pointing out that recent U.S. efforts to build democracy abroad have been costly and unsuccessful, Trump has also jettisoned democracy promotion as a foreign policy goal, aside from some stray tweets in support of anti-regime protesters in Iran. So far as one can tell, he cares not one whit about the liberal transformation of other societies. In Afghanistan, for example, his strategy counts not on perfecting the Afghan government but on bludgeoning the Taliban into negotiating (leaving vague what exactly the Taliban would negotiate). More generally, Trump has often praised foreign dictators, from Vladimir Putin of Russia to Rodrigo Duterte of the Philippines. His plans for more restrictive immigration and refugee policies, motivated in part by fears about terrorism, have skated uncomfortably close to outright bigotry. His grand strategy is primacy without a purpose.

Such lack of concern for the kinder, gentler part of the American hegemonic project infuriates its latter-day defenders. Commenting on the absence of liberal elements in Trump's National Security Strategy, Susan Rice, who was national security adviser in the Obama administration, wrote in December, "These omissions undercut global perceptions of American leadership; worse, they hinder our ability to rally the world to our cause when we blithely dismiss the aspirations of others."

But whether that view is correct or not should be a matter of debate, not a matter of faith. States have long sought to legitimate their foreign policies, because even grudging cooperation from others is less costly than mild resistance. But in the case of the United States, the liberal gloss does not appear to have made hegemony all that easy to achieve or sustain. For nearly 30 years, the United States tested the hypothesis that the liberal character of its hegemonic project made it uniquely achievable. The results suggest that the experiment failed.

Neither China nor Russia has become a democracy, nor do they show any sign of moving in that direction. Both are building the military power necessary to compete with the United States, and both have neglected to sign up for the U.S.-led liberal world order. At great cost, Washington has failed to build stable democratic governments in Afghanistan and Iraq. Within NATO, a supposed guardian of democracy, Hungary, Poland, and Turkey are turning increasingly authoritarian. The European Union, the principal liberal institutional progeny of the U.S. victory in the Cold War, has suffered the loss of the United Kingdom, and other member states flaunt its rules, as Poland has done regarding its standards on the independence of the judiciary. A new wave of identity politics-nationalist, sectarian, racist, or otherwise-has swept not only the developing world but also the developed world, including the United States. Internationally and domestically, liberal hegemony has failed to deliver.

### --AT: Plan stops decline

#### Their impacts are fear-mongering, no risk of decline

Fettweis 2018 - Associate Professor of Political Science at Tulane University   
Christopher J, *Psychology of a Superpower: Security and Dominance in U.S. Foreign Policy,* Columbia University Press, p. 168-170

A few things can be said with certainty, however. First, the main engine of U.S. decline-the rise of challengers-has not occurred. Whether because of high costs, the essential benevolence of U.S. unipolarity, or some other factor, the world has not witnessed widespread balancing behavior over the last twenty-five years. States have generally tolerated unprecedented disparities in material power without much reaction at all. No new coalitions have formed to counter U.S. capabilities, which would be symptomatic of "external balancing," and few states are building up their militaries, or "internally" balancing the United States.24 The only major exception to this rule is China, but its commitment to balance is less clear than is sometimes portrayed. Beijing has consistently chosen to devote a very small percentage of its GDP toward defense-at or near 2 percent-a rate that is not growing.25 Increasing Chinese defense expenditures are a reflection of its growing economy, in other words, but not necessarily an increased imperative to balance the United States. Although the real level of Chinese spending is hotly debated, the Peoples' Republic could certainly devote more to its defense if it felt the need.

Second, perceptions of decline thrive during periods of uncertainty, especially those following foreign-policy disasters. It is no coincidence that Paul Kennedy wrote Rise and Fall of the Great Powers in the United States in the 1970s or that Otto Spengler wrote about the decline of the West from the perspective of Germany in the early 192os.26 The mixed bag of negative emotions that follow foreign-policy catastrophe-anger, guilt, shame, doubt, insecurity-contributes to an overall sense of pessimism about the future and about foreign policy in general. Disasters always seem to portend even greater ones to come. Status is fueled by perception as much as reality, and when pessimism reigns, decline seems imminent.

Third, the United States is structurally and culturally predisposed to suffer from status insecurity. While all states worry to some degree about their relative power, those at the top tend to worry even more. Psychologists have long known that people are motivated more strongly by the specter of loss than the potential for gain, and no state has more to lose than the unipole.27 People are naturally insecure about what they value most, and the hypercompetitive United States values its status.28 As a result, it is predisposed to worry about losing that status and thereby puts more stock in the arguments of declinists than might otherwise be warranted. Michael Cox has observed that "the United States is a very special kind of polity preoccupied by status and consumed by inner doubt."29 That specialness leads us to fear more than necessary and to obsess over our ranking.

Fourth, proponents of decline tend to confuse concepts. One can argue that unipolarity is coming to an end or that the United States is in hegemonic decline, but the two are not the same. For the former to be true, the power of the United States would have to be waning in relation to potential challengers. For the latter, the influence of the United States would have to be declining. It is the unipolarity-versus-hegemony distinction once again, and, as usual, the two are not kept separate in much of the writing about systemic durability. Previous iterations of declinism consistently conflated the aggregate power of the United States with its ability to bring about its preferred outcomes. The former is much easier to measure, and definitive statements can be made as a result. Today, the only empirical dimension along which the U.S. advantage may be slipping is in aggregate economic power, which is always expressed in terms of gross domestic product. One measurethe growth in China's GDP-has provided the lion's share of the ammunition for those predicting the end of unipolarity. In nearly all other measures of raw and symbolic power, unipolarity shows little sign of waning.

### 1NC – Heg = War

#### Hegemony causes war, proliferation, and terrorism

Mearsheimer 2018 - R. Wendell Harrison Distinguished Service Professor of Political Science at the University of Chicago  
John, *The Great Delusion: Liberal Dreams and International Realities*, Yale University Press, p. 2-3

This enthusiasm notwithstanding, liberal hegemony will not achieve its goals, and its failure will inevitably come with huge costs. The liberal state is likely to end up fighting endless wars, which will increase rather than reduce the level of conflict in international politics and thus aggravate the problems of proliferation and terrorism. Moreover, the state's militaristic behavior is almost certain to end up threatening its own liberal values. Liberalism abroad leads to illiberalism at home. Finally, even if the liberal state were to achieve its aims-spreading democracy near and far, fostering economic intercourse, and creating international institutions-they would not produce peace.

The key to understanding liberalism's limits is to recognize its relationship with nationalism and realism. This book is ultimately all about these three isms and how they interact to affect international politics. Nationalism is an enormously powerful political ideology. It revolves around the division of the world into a wide variety of nations, which are formidable social units, each with a distinct culture. Virtually every nation would prefer to have its own state, although not all can. Still, we live in a world populated almost exclusively by nation-states, which means that liberalism must coexist with nationalism. Liberal states are also nation-states. There is no question that liberalism and nationalism can coexist, but when they clash, nationalism almost always wins.

#### Specifically we’ll go to war with Russia and China because of entrapment

Edelstein 2018 – Prof in the Edmund Walsh School of Foreign Service and the Dept. of Government @ Georgetown  
David M and Joshua R. Itzkowitz Shifrinson, “It’s a trap! Security commitments and the risks of entrapment” in *US Grand Strategy in the 21st Century: The Case for Restraint*, Routledge Press, p. 32

The preceding discussion (summarized in Table 2.1) has large implications for the United States. During the Cold War, bipolarity constrained the importance of allies, limiting the risk of entrapment. Moreover, the prospect of nuclear war discouraged risky behavior by the superpowers and their allies. Today, however, the risk of entrapment born of moral hazard and states' search for security is larger and possibly increasing. As long as the US continues to make commitments overseas and fear the emergence of a peer competitor, American partners will be tempted to act in risky ways, expecting that Washington will feel compelled to come to their rescue should they get into trouble.

Insofar as the United States opposes Chinese or Russian aggression, smaller states will be tempted to provoke China or Russia to garner growing American support. If the United States is opposed to the emergence of great power peer competitors, then it may well opt to come to the aid of smaller states threatened by those potential competitors. This also means that countries that have limited or no explicit security commitments from the United States may try to profit from the insurance policy offered by the United States by provoking conflicts and expecting the United States - whose interests are clear - to ride to their defense. In the next section, we take a preliminary look at some evidence to test these claims. We focus on events in East and Southeast Asia over the last few years. Some have characterized Chinese aggression in recent years as reactionary. That is, China has felt compelled to respond to perceived provocations from smaller Asian nations such as the Philippines and Vietnam. Even though the US does not have formal security commitments to either country, Washington subsequently feels compelled to signal to these countries that it will stand up to Chinese aggression.

### 2NC – Mearsheimer

#### Multipolarity is inevitable – nothing will stop the relative decline of US leadership and the rise of other powers; this is only something to fear if the US tries to maintain its status as the unipolar leader because it necessitates a confrontation with those rising powers

Mearsheimer 2018 - R. Wendell Harrison Distinguished Service Professor of Political Science at the University of Chicago  
John, *The Great Delusion: Liberal Dreams and International Realities*, Yale University Press, p. 227-229

If the United States had not been deeply involved in the developing world, might the Soviet Union have invaded a host of minor powers and turned them into puppet states? Perhaps the Soviets might have attacked a few smaller countries, but the result would not have been a steady string of communist victories. On the contrary, the Soviets would have ended up in one quagmire after another. Just look at what happened when the Soviet military moved into Afghanistan in 1979. They were stuck for ten years and ultimately suffered a humiliating defeat. U.S. interests would have been well served if the Soviets had had more Afghanistans, just as Moscow would have been well served if the United States had had more Vietnams. Baiting and bleeding the other side was a smart strategy for both superpowers.

Yet it is still difficult for American policymakers to think along these lines. Most of them fail to appreciate the power of nationalism and instead overestimate universal ideologies like communism and liberalism. Nevertheless, the historical record shows that the best strategy for a great power dealing with minor powers is to avoid getting involved in their domestic politics-and certainly not to invade and occupy them unless it is absolutely necessary. Aggressive intervention is what great powers should try to draw their rivals into doing. U.S. policymakers should keep this lesson in mind if the Sino-American security competition continues to heat up. A proper understanding of the relationship between liberalism, nationalism, and realism suggests that even the mightiest powers on the planetincluding the United States-should pursue a foreign policy of restraint. Any country that fails to understand that basic message and tries instead to shape the world in its own image is likely to face unending trouble.

Where Is the United States Headed?

The American foreign policy establishment would surely resist any move to abandon the pursuit ofliberal hegemony and adopt a foreign policy based on realism. Both the Democratic and Republican parties are deeply wedded to promoting liberalism abroad, even though that policy has been a failure at almost every turn.18 Although the American public tends to favor restraint, the governing elites pay little attention to public opinion-until they have to-when formulating foreign policy.

Nevertheless, there is good reason to think this situation is about to change, for reasons beyond the control of the foreign policy establishment. It appears that the structure of the international system is moving toward multipolarity, because of China's striking rise and the resurrection of Russian power. This development is likely to bring realism back to the fore in Washington, since it is impossible to pursue liberal hegemony when there are other great powers in the international system. American policymakers have not had to concern themselves with the global balance of power since the Cold War ended and the Soviet Union collapsed, but the unipolar system seems to have been short-lived, which means that the United States will once again have to worry about other great powers. Indeed, the Trump administration has made it clear, to quote Secretary of Defense James Mattis, that "great power competition between nations is a reality once again," and "great power competition, not terrorism, is now the primary focus of U.S. national security strategy. "19

In a world of three great powers, especially when one of them has China's potential military might, there is sure to be security competition and maybe even war. 20 The United States will have little choice but to adopt a realist foreign policy, simply because it must prevent China from becoming a regional hegemon in Asia. That task will not be easy if China continues to grow economically and militarily. Still, liberalism will most likely continue to influence U.S. policy abroad in small ways, as the impulse to spread democracy is by now hardwired into the foreign policy establishment's DNA. Although great-power competition will prevent Washington from fully embracing liberal hegemony, the temptation to pursue liberal policies abroad will be ever present.

In addition to this lingering tendency to adopt liberal strategies on the margins of a largely realist foreign policy, there is also the danger that U.S. policymakers will not fully grasp that nationalism limits their ability to intervene in other countries just as much as it limits their adversaries' ability to conquer other states. They failed to understand the effects of nationalism both during the Cold War and in the post-Cold War world, and there is no assurance they will get it in the future. Even with the return of realism and the demise ofliberal hegemony, it will still be imperative to sound the tocsins about the dangers of a liberal foreign policy and the importance of understanding how nationalism limits great powers' ability to act.

### 2NC – US- China War

#### Retrenchment is necessary to prevent a US-Sino war

MacDonald 2018 - Associate Professor of Political Science @ Wellesley College  
Paul K and Joseph M. Parent, *Twilight of the Titans: Great Power Decline and Retrenchment*, Cornell U Press, p. 199-200

International relations thinkers are rightly obsessed with rise and fall, war and peace. To date, most of them have looked at the historical record and not seen much cause for optimism. As new powers rise and old powers fall, the prospects for peace diminish because aggression pays and domestic politics is rife with dysfunction. Long placid periods are punctuated by thunderous bursts of war and change. Fear, honor, and greed come to the fore, and the tragedy of great powers politics repeats once more.

In this book, we developed a dissenting view. Starting from standard assumptions, we reasoned that the world is harsh enough to discipline domestic faction but not so harsh as to regularly demand aggression. Leaders have an array of policy tools to react in their own ways to shifting conditions, and states can seize control of their fates. Decline encourages retrenchment, but this is no bad thing and seldom a belligerent one. Past policymakers have done an admirable job keeping their ships of state from running aground, and today’s policymakers have better ships, better gauges, and better weather.

There is no sense in exacerbating decline by indulging delusions of everlasting grandeur, coddling ossified institutions, and living in the past. The United States has been the world’s largest economy for over a century. It has seen off numerous challengers before and can do so again. But the best chances for success are to keep one’s perspective, patience, and prudence intact. The United States is declining, but not much, and China is preoccupied by its own rise. This is no reason for preventive war or gratuitous malice. The odds are good for peace and prosperity, but there are non-negligible risks that domestic politics or unexpected crises could derail events. If the United States gives the mistaken impression that it is seeking to contain a rising China, whether through a rapid military buildup or intransigent diplomacy, this would empower hardline factions, stoke fears of falling dominos, and raise the stakes of minor crises. It is the American rejection of retrenchment, and the alarm this inspires in China, that could make war appear inevitable.

#### Attempting to maintain heg makes war with China inevitable

Edelstein 2018 – Prof in the Edmund Walsh School of Foreign Service and the Dept. of Government @ Georgetown  
David M and Joshua R. Itzkowitz Shifrinson, “It’s a trap! Security commitments and the risks of

Since its 2010-2011 announcement, the pivot has inserted the United States into a host of Asian political and military disputes with China involving ownership of contested maritime space and islands in the South and East China Seas. Though there may be economic resources beneath the surface around some of these locales, neither the United States nor its allies have an intrinsic interest in ownership of contested areas. Instead, the contested maritime domains are worrisome to US allies for what they suggest about China's territorial ambitions. They are therefore important to the United States for the signal American actions send to allies over American credibility. Thus, the United States has moved to back its allies in their disputes with the P.R.C. by rhetorically portraying China as the principal aggressor, clarifying that US commitments to the allies would cover the maritime areas under dispute, and - above all - has dispatched its own military forces to enforce what the US and its allies define as the "status quo" in contravention of China's own interests (Russell 2014; White House 2014; US Pacific Command 2015;Valencia 2016; LaGrone 2015; Panda 2016).Whatever the legitimacy of these actions, their effect is to create a self-perpetuating cycle: the more the United States stands by its allies in opposing potential Chinese ambitions, the nominally more credible the American resolve to defend its allies, the more the allies are inclined to act aggressively toward China, and the greater the likelihood of a direct USChinese confrontation. In other words, treating American support for its allies as a litmus test of the alliances themselves requires the United States to take steps on behalf of its allies that risk conflict with China. This is entrapment of the purest sort. The United States could readily provide security to its friends in East Asia, maintain Asia's political status quo, or more generally limit the rise of China without involving itself in Asian maritime disputes. To the extent that the United States simply wants to preserve East Asian stability, it could negotiate directly with the P.R.C. to settle conflicts of interest on a bilateral basis. To the extent that the United States wants to prevent China from becoming an Asian hegemon or engaging in military action beyond its borders, it could simply surge forces to the region as crises develop or build up the military forces of its clients (Itzkowitz Shifrinson and Lalwani 2014; Glaser 2015; Mirski 2013). That these options are treated as insufficient suggests entrapment at play. Even if protecting Japan, South Korea, and other regional partners is in the United States' interest, only entrapment explains the timing and form of the American response.3

The second driver of entrapment comes from the response by East Asian countries themselves. It will be some time before we have detailed evidence on what was said to whom that convinced the Obama administration to pivot to East Asia. Nevertheless, the East Asian response since 2010-2011 suggests that moral hazard is increasing risks for the United States. One of the most striking trends in East Asia since the pivot is the renewed assertiveness of East Asian states in dealing with China Gohnston 2013; Associated Press 2015). This trend includes independent action by the Japanese, Filipino, Vietnamese, and other military forces to take a forward-leaning stance on maritime disputes that, at minimum, helps to justify a Chinese response.Japan, Korea, and others lobbied for the pivot for the express purpose of having the United States help them manage the rise of China - the implication being that, without an active American role, they would either bandwagon with China or engage in increasingly aggressive policies with a large risk of war.

As things stand, East Asia is already witness to an arms race and militarized interstate disputes: Japan is taking increasing military measures to confront Chinese incursions into the disputed Senkakus, including regularly confronting Chinese aircraft flying over the disputed region (Gady 2015; Reuters 2016a; Kazianis 2016; Reynolds 2015); Vietnam and the Philippines have grown increasingly willing to confront China in the South China Sea while deepening military ties with other countries challenged by China (Torode 2015;Vietnam Right Now 2015; Bowcott 2015; Reuters 2016b); and even Australia - which has no maritime disputes with China - has taken to militarily challenging Chinese maritime claims (Defense News 2015; News.com.au 2015). Independently, none of these countries (except perhaps Japan) has the wherewithal to defeat China. These actions are almost certainly born of the expectation that the United States will come to their aid if a dispute escalates to war. 4 Thus, unless the pivot has had no effect on allied behavior, then its main influence has been to (1) avoid bandwagoning, but (2) allow the very assertiveness the United States nominally sought to avoid in the first place! To put the issue differently, the claims employed by Asian allies and partners to push what became the pivot strongly suggest that it encouraged their over-assertiveness. This is moral hazard: take away the United States' post-pivot policy, and the East Asian allies would almost certainly not be tilting with China to the same extent. Some smaller allies, in fact, might bandwagon altogether. If so, this suggests the extent to which entrapment dynamics are at play.

In sum, entrapment is alive and well in terms of both the arguments employed and the policies adopted by the United States and its allies since the late 2000s. No war has occurred, but crises are ongoing, and the intensity of American backing for its East Asian clients is growing. This is a recipe for miscalculation. As American forces continue to move into the region, as American diplomacy continues to take an anti-China flavor, and as allies simultaneously spur and build upon these trends, the United States is approaching active involvement in the wrong conflicts, at the wrong time, and in the wrong place.The United States has an interest in maintainingJapan and other major states as independent actors friendly to the United States, noting their particular island disputes with China. Entrapment is alive and well as the United States mistakes the latter for the former. And, importantly, even if the United States decides at some point that conflict with China is necessary to protect its national interests, the US could still be entrapped by its allies into fighting that conflict at an unwelcome time with unattractive goals and using extraordinary means. In short, the US need not be drawn into a wholly unwelcome war for entrapment to nonetheless occur.

## Advantage CPs

### CP – US Biotech lead

#### The Department of State, Department of Defense, and Department of Commerce should collaborate on biotechnology policy.

#### It solves.

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/>]

Recommendations

As early as 1958, the Department of Commerce was tracking the economic contribution of semiconductors, even though they made up less than 0.1 percent of the gross domestic product. Yet, today, the U.S. government has made no equivalent effort to track the much more significant role of biotechnology.

This illiteracy is a national security issue. American and Chinese bioeconomies are in competition, and Beijing asserts that it is investing with the intent to take, and to then maintain, the lead. To sustain America’s advantage, the U.S. Department of Defense should better understand its reliance on biotechnology and increase investment in it accordingly. The Pentagon’s recent investment in the BioIndustrial Manufacturing and Design Ecosystem is a notable step in the right direction. However, the seven-year budget for this project is approximately the cost of a single F-35A. For an investment that could impact the entire defense supply chain, this is inadequate.

We recommend the following plan of action for the Department of Defense to take its place alongside the Departments of Commerce and State in the broader interagency effort to secure America’s biotechnology advantage.

First, in close coordination with the Department of Commerce, the Department of Defense should make a systematic effort to better understand the role of biotechnology in the economy, supply chains, and manufacturing. This, in turn, should inform additional oversight and regulatory controls.

The responsibility to understand, prepare for, and respond to biotechnology threats is balkanized, spread across at least nine departments and agencies. Vulnerabilities in the bioeconomy will affect the Department of Defense in terms of readiness, soldier health, and the ability to fulfill missions. Addressing those vulnerabilities begins with a sustained, comprehensive effort to understand the role of biotechnology in industry today, as well as how that industry contributes to defense supply chains, and how military acquisition policy shapes biotechnology. To that end, the Pentagon should work with the Department of Commerce to create domestic reporting codes for biotechnology revenues and employment for the quarterly and annual economic census, and further incorporate those codes into the North American Industrial Classification System. Institutionalizing the gathering of these data is the first step toward sustainable policymaking and rational spending.

The Department of Commerce should then consider adding import/export controls on biotechnology, while avoiding overly broad restrictions that suffocate innovation. Protecting foundational technologies using the Foreign Investment Risk Review Modernization Act and Export Control Reform Act will be critical for securing biotechnology. However, biotechnology competition is not exclusive to commercial activities. The Pentagon should assess critical vulnerabilities and dependencies to assist the other agencies in bringing China’s foreign biotechnology access in line with standards in other major markets.

The Department of Defense has been asked to document and secure supply chains critical to defense applications and to the overall U.S. economy. This should also apply to biotechnology. Current Pentagon efforts to expand domestic biological manufacturing capabilities are an important start, but a broader effort is needed. An empowered deputy national security adviser could help oversee the relationship between the Pentagon and the National Economic Council to promote and secure the military’s broader technology needs.

Second, the Department of Defense should better study the accomplishments and intent of China, especially the Chinese military, in developing biotechnology as a strategic technology.

Once the Department of Defense better understands critical U.S. biotechnology dependencies on China, it can begin the work of reducing them. This requires an interagency examination to identify cross-cutting resources, develop mitigation strategies, formulate best practices to bolster innovation, and expand outreach to allies and partners to reduce systemic gaps China could exploit. Partnership with industry and allies will allow the U.S. government to understand and counter Beijing’s efforts to distort commercial activity in its favor.

To this end, the Department of Defense should mirror the National Security Council’s effort by creating an emerging technology portfolio within Office of the Under Secretary of Defense-Policy. While other technology offices in the Department of Defense are internally focused, an entity in this office that concentrates externally on foundational technology competition is required. Such an office may be able to address uncertainties in assessments of Chinese biotechnology revenues and capabilities.

Finally, in coordination with the Department of State, the Department of Defense should identify opportunities for dialogue with the People’s Liberation Army about biotechnology-related security issues.

It is time to include biotechnology in the dialogue mechanisms that compose bilateral U.S. defense relations with the People’s Liberation Army. This dialogue should prioritize the ethics of biotechnology in the context of future conflicts, the escalatory risks this technology creates, and the possibility of cooperation where the interests of the two nations intersect. Both sides should work toward a common understanding related to ethics, policies, and standards when operationalizing biotechnology. This will help avoid miscalculation and promote strategic stability.

Unlike the U.S. government, Chinese leadership has a carefully considered position on the importance of biosafety and “biological problems” in national security. While these problems are understood to encompass traditional weapons concerns, they also extend to the health of the entire natural world in the context of ever-expanding applications of biotechnology. This position might provide an opportunity for constructive engagement at a time when tensions are rising.

### CP – Let Scientists Solve

#### The United States federal government should fund an international summit on scientific norms related to biotechnology.

#### Scientists are better than politicians at developing norms.

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]

SELF-GOVERNMENT

For all its unprecedented power, CRISPR is of a piece with other research breakthroughs in synthetic biology. It has both enormous potential to transform societies for the better and possible malign uses. Dealing with the latter will require crafting highly specific rules so that regulators don’t end up sweeping all CRISPR research into a costly new regulatory net with little or no benefit to society. And even the best-designed regulation cannot eliminate the possibility that researchers will accidentally discover a dangerous new application of a new technology. Before regulators consider additional rules, CRISPR researchers will have to comply with existing scientific norms and regulations, perhaps the field’s biggest short-term challenge.

The modern scientific community is both cooperative and competitive. Even so, scientific establishments have shown themselves capable of self-governance when public safety and confidence are at stake. The standards developed by recognized authorities are encouraging: for example, in the first decade of this century, in response to new laboratory practices involving the use of human stem cells in nonhuman animals, national science academies came up with a set of guidelines. The guidelines are voluntary, but they delineate in a well-informed way what is and what is not ethically acceptable, and they have been widely embraced by scientists, the editors of prominent scientific journals, and regulators.

The most effective standards for gene-editing research will come from the scientific community itself, through international summits of science academies and a continual process of intellectual exchange. Those are the forums that can respond best to often unpredictable developments in the science and react sensitively to public opinion. Prudent self-governance among scientists may not produce headlines, but it is the process most likely to enable CRISPR and the next generation of research breakthroughs to reach their full potential.

### CP – BWC and CWC

#### The United States federal government should fund collaboration between the BWC and the CWC for developing regulations for biotechnology.

#### It solves by letting the experts decide.

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]

3.4 Conclusions and Recommendations

The regulatory landscape for biosecurity and synthetic biology can best be described as a ‘patchwork’ of international conventions, national laws, regulations, guidelines, etc. In many instances, these were designed to address other (state biowarfare programs) or earlier (biosafety) concerns.

While synthetic biology appears to be broadly (if indirectly) covered by existing top-down governance measures (e.g. GMO laws), several characteristics of the science, including convergence, democratization and intangibility, point to possible regulatory gaps. How governments address these novelties depends upon their regulatory cultures and perceptions of risk.

To date, the regulatory response, while varied (ranging from more precautionary to more laissez-faire), suggests a preference for evolutionary rather that revolutionary regulatory change. Like the regulatory response to GMOs, there is a tendency for governments to adapt existing regulations to new technologies.

Whether new conventions, laws or regulations are (or are not) needed to address synthetic biology’s novelties is open to question. At the very least, there is a need to monitor advances in the field and to consider how top-down governance approaches could be improved. The following recommendations aim to advance this discussion:

The BWC, the premier international forum that addresses biological threats, should play a leading role in monitoring security-relevant advances in synthetic biology. Proposals to establish a BWC scientific advisory body and to introduce a S&T reporting requirement into the CBM mechanism should be encouraged.

In view of the growing convergence between biology, chemistry, engineering and computing, inter-convention dialogue is needed between the BWC and CWC, among others, to ensure the full scope of synthetic biology’s risks are taken into consideration and that there is agreement on how to address these risks in the event of deliberate misuse by state or non-state actors.

Given that many security concerns about synthetic biology relate to its informational (e.g. digital sequence information) rather than physical (e.g. DNA sequencers) dimensions, it is necessary to develop improved methods of regulating intangible technology transfers. It is no longer sufficient to rely exclusively on material controls and list-based approaches to regulation.

Synthetic biology is contributing to the democratization of genetic engineering. It is therefore essential to enlist the support of non-governmental organizations and actors, including technology developers, industry and users, in the regulatory response. The value of complementing top-down governance measures with bottom-up governance measures, drawing on limited forms of self-regulation or self-policing, will only increase as the tools of modern biology become more accessible.

There is no one-size-fits-all approach to synthetic biology’s governance. Finding the appropriate ‘mix’ of top-down and bottom-up regulatory measures will require foresight, broad dialogue, and a willingness on the part of governments to look to new, hybrid forms of risk regulation.