# 1NC NDCA Round 4

## 1

### DA

#### China’s Asteroid Mining efforts are light-years ahead of everyone else – now is key for Asteroid Mining. Successful Mining solves Warming through Green Transition.

Cohen 21 Ariel Cohen 10-26-2021 "China’s Space Mining Industry Is Prepping For Launch – But What About The US?" <https://www.forbes.com/sites/arielcohen/2021/10/26/chinas-space-mining-industry-is-prepping-for-launch--but-what-about-the-us/?sh=6b8bea862ae0> (I am a Senior Fellow at the Atlantic Council and the Founding Principal of International Market Analysis, a Washington, D.C.-based global risk advisory boutique.)//Elmer

Exploration of space-based natural resources are on the Chinese policy makers’ mind. The question is, what Joe Biden thinks? In April of this year, China’s Shenzen Origin Space Technology Co. Ltd. launched the NEO-1, the first commercial spacecraft dedicated to the mining of space resources – from asteroids to the lunar surface. Falling costs of space launches and spacecraft technology alongside existing infrastructure provides a unique opportunity to explore extraterrestrial resource extraction. Current technologies are equipped to analyze and categorize asteroids within our solar system with a limited degree of certainty. One of the accompanying payloads to the NEO-1 was the Yuanwang-1, or “little hubble” satellite, which searches the stars for possible asteroid mining targets. The NEO-1 launch marks another milestone in private satellite development, adding a new player to space based companies which include Japan’s Astroscale. Private asteroid identification via the Sentinel Space Telescope was supported by NASA until 2015. As private investment in space grows, the end goal is to be capable of harvesting resources to bring to Earth. “Through the development and launch of the spacecraft, Origin Space is able to carry out low-Earth orbit space junk cleanup and prototype technology verification for space resource acquisition, and at the same time demonstrate future asteroid defense related technologies.” In the end, it will come down to progressively lowering the cost of launched unit of weight and booster rocket reliability – before fundamentally new engines may drive the launch costs even further down. The April launch demonstrates that China is already succeeding while the West is spinning its wheels. The much touted Planetary Resources and Deep Space Industries (DSI) DSI -1% were supposed to be the vanguard of extra-terrestrial resource acquisition with major backers including Google’s GOOG -1.4% Larry Page. But both have since been acquired, the former by block chain company ConsenSys and the latter by Bradford Space, neither of which are prioritizing asteroid mining. This is too bad, given that that supply chain crunches here on Earth – coupled with the global green energy transition – are spiking demand for strategic minerals that are increasingly hard to come by on our environmentally stressed planet. And here China currently holds a monopoly on rare earth element (REE) extraction and processing to the tune of 90%. REE’s 17 minerals essential for modern computing and manufacturing technologies for everything from solar panels to semi-conductors. Resource-hungry China also has major involvement in global critical mineral supply chains, which include cobalt, tungsten, and lithium. As I’ve written before, the Chinese hold of upstream and downstream markets is staggering. Possessing 30% of the global mined ore, 80% of the global processing facilities, and an ever increasing list of high dollar investments around the world, China boasts over $36 billion invested in mining projects in Africa alone. Beijing’s space program clearly indicates that the Chinese would also like to tighten their grip on space-based resources as well. According to research, it is estimated that a small asteroid roughly 200 meters in length that is rich in platinum could be worth up to $300 million. Merrill Lynch predicts the space industry — including extraterrestrial mining industry – to value $2.7 trillion in the next three decades. REEs are fairly common in the solar system, but to what degree remains unknown. The most sought after are M-type asteroids which are mostly metal and hundreds of cubic meters. While these are not the most common, the 27,115 Near Earth asteroids are bound to contain a few. This – and military applications – are no doubt a driving factor of China’s ever increasing space ambitions.

#### Warming causes Extinction

Kareiva 18, Peter, and Valerie Carranza. "Existential risk due to ecosystem collapse: Nature strikes back." Futures 102 (2018): 39-50. (Ph.D. in ecology and applied mathematics from Cornell University, director of the Institute of the Environment and Sustainability at UCLA, Pritzker Distinguished Professor in Environment & Sustainability at UCLA)//Re-cut by Elmer

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (**climate change**, global **freshwater** cycle, **and** ocean **acidification**) do **pose existential risks**. This is **because of** intrinsic **positive feedback loops**, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all **directly connected to** the provision of **food and water**, and **shortages** of food and water can **create conflict** and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. **Ample clean water** is not a luxury—it **is essential for human survival**. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al., 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes **Humans** are remarkably ingenious, and **have adapted** to crises **throughout** their **history**. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). **However**, the many **stories** **of** human ingenuity **successfully** **addressing** **existential risks** such as global famine or extreme air pollution **represent** environmental c**hallenges that are** largely **linear**, have immediate consequences, **and operate without positive feedbacks**. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, **the Earth’s climate system is rife with positive feedback loops**. In particular, as CO2 increases and the climate warms, that **very warming can cause more CO2 release** which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox, Betts, Jones, Spall, & Totterdell, 2000; Hajima, Tachiiri, Ito, & Kawamiya, 2014; Knutti & Rugenstein, 2015; Rosenfeld, Sherwood, Wood, & Donner, 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warming (Melillo et al., 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey, Stone, & Quirk, 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies, Janssen, & Walker, 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that **forest fires will become more frequent** and severe with climate warming and drought (Scholze, Knorr, Arnell, & Prentice, 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al., 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-california-largest-wildfire). This **catastrophic fire** embodies the sorts of positive feedbacks and interacting factors that **could catch humanity off-guard and produce a** true **apocalyptic event.** Record-breaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry, Schramm, & Ebert, 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof, DeAngelo, Saleska, & Harte, 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement, Burgman, & Norris, 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that **runaway climate change,** and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks **portends** even greater **existential risks**. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change.

## 2

### CP

#### CP Text: The People’s Republic of China should

#### increase and encourage private and civil space cooperation with the United States over appropriation of outer space.

#### de-militarize its space industry.

#### dismantle and remove ASAT weapons.

#### The United States Federal Government should repeal the Wolf Amendment.

#### The Counterplan competes – it re-directs China’s commercial space industry to productive cooperation with the United States. The 1AC said that China’s government is reliant on private action meaning the Plan collapses all of the space sector meaning meaningful cooperation with the US becomes impossible.

#### Cooperation de-escalates the Space Race, solves Sino-Russian axis, and spills-over to broader US-China relations

Marshall and Hadfield 21 Will Marshall and Chris Hadfield 4-15-2021 "Why the U.S. and China Should Collaborate in Space" <https://time.com/5954941/u-s-china-should-collaborate-in-space/> (CEO of Planet which operates 200 satellites that image the entire Earth landmass on a daily basis, and he formerly worked at NASA on lunar missions and space debris. Colonel Chris Hadfield was Commander of the International Space Station and flew both the U.S. Space Shuttle and Russian Soyuz vehicles. Prior to that he served as a fighter/test pilot with the U.S. Air Force, U.S. Navy, and Royal Canadian Air Force.)//Elmer

While much has been made of the tense March 18 exchange between American and Chinese diplomats in Anchorage, Alaska, one area became an unlikely candidate for cooperation: outer space. During a press conference after the meeting, Jake Sullivan, the U.S. National Security Advisor, pointed out that the Perseverance rover that recently landed on Mars “wasn’t just an American project. It had technology from multiple countries from Europe and other parts of the world.” China’s top diplomat, Yang Jiechi, seized the opportunity to say that, “China would welcome it if there is a will to carry out similar cooperation from the United States with us.” Planned or not, Yang’s comment gave voice to one very smart way two geopolitical rivals sharing the same planet could work together despite their growing tensions. Space exploration has long been used to foster deep cooperation, even between adversaries. During the height of the Cold War, the U.S. and U.S.S.R. jointly undertook the 1975 Apollo-Soyuz mission, which both served as a means of political rapprochement and opened the possibility of cooperation in other areas. Those links endured. After the Soviet Union collapsed, Russia was invited to partner in the construction of the International Space Station (ISS). It was a multi-layered act that went beyond simple generosity; the more work former Soviet scientists had to do designing and building the ISS, the less likely they’d be to sell their expertise to other countries. Today, Sino-American space cooperation is similarly desirable. It could improve ties as it did for the U.S. and Russia, de-escalate an emerging Sino-Russian axis in space, and serve as a bargaining chip to help sustain other areas of cooperation. While China and the U.S. seem to clash on virtually every issue, space, by its nature, is different. Orbit isn’t a high-ground that one can seize. Instead, space works like a commons, where for any one state or company to be able to operate safely, all have to act responsibly. We need peaceful cooperation to enjoy its benefits. One reason not to cooperate in space with a geopolitical rival is technology transfer. There are legitimate concerns that collaboration could lead to technology sharing that unfairly advances China. Indeed, in 2011, the U.S. Congress included a passage, known as the Wolf Amendment, in an appropriations bill, forbidding NASA from cooperating in any way with China for fear of technological theft or espionage. The reasoning was straightforward: The U.S. enjoys significant leadership in some space technologies, including satellites, and much of that technology is proprietary, shared with no other countries. In the area of human spaceflight, however, things are different. The U.S. has extensively shared the entire ISS program for decades with the fourteen partner nations, including Russia. If there ever were secrets there, they are secrets no more. In fact, Russia and the U.S. as partners saved the day between 2011, after the space shuttles were grounded, and 2021, when the U.S. regained the ability to transport astronauts to space. During that decade, Russia’s Soyuz spacecraft served as the only way to get crews to and from the station. At the same time, uncrewed American resupply ships similarly helped keep the ISS viable when the Russian Soyuz fleet was grounded following mishaps. China has developed and proven a very successful human spaceflight program; adding their launch and spacecraft capability to the partnership would strengthen the overall mission. In order for China and the U.S. to work together in space, some things would have to change. First, the Wolf Amendment would have to be repealed—nothing meaningful can happen until that goes. Cooperation might then begin in lower profile areas such as sharing remote sensing data and reducing orbital debris. The United States and Europe have led the way with Landsat and Copernicus satellite programs providing free images of Earth that can be used to understand changes to our environment. The Chinese have yet to create a similar data share program for their Earth imaging systems—but they should. The United States and China could also discuss joint efforts to reduce the belt of space junk that circles the planet and threatens everyone’s satellites. Most importantly, cooperation could extend to joint human spaceflight missions; the US could invite China to conduct a crewed visit to the ISS, or to join in the human exploration of the Moon, targeted to happen in this decade and which both nations are now working on separately; the goal would be a joint Moon base rather than a space race. For decades, space travel has provided an opportunity for humans to see our world differently. Apollo 11 astronaut Michael Collins said, “The thing that really surprised me was that the Earth projected an air of fragility.” Chinese astronauts, since Yang Liwei’s first flight 18 years ago, have surely had a similar experience gazing down at our planet. Cooperating in space can give the United States and China the opportunity to change their thinking together. Bold American leadership can be a leveraged move in reducing tensions, as it was in keeping the Cold War cold—a win for all nations and our shared, blue-green planet.

#### US-China Relations key to prevent escalation – current US course turns status quo cold war hot.

Nye 21 Joseph Nye 3-3-2021 "The factors that could lead to war between the US and China" <https://www.aspistrategist.org.au/the-factors-that-could-lead-to-war-between-the-us-and-china/> (professor at Harvard University and author)//Elmer

When China’s foreign minister, Wang Yi, recently called for a reset of bilateral relations with the United States, a White House spokesperson replied that the US saw the relationship as one of strong competition that required a position of strength. It’s clear that President Joe Biden’s administration is not simply reversing Donald Trump’s policies. Some analysts, citing Thucydides’ attribution of the Peloponnesian War to Sparta’s fear of a rising Athens, believe the US–China relationship is entering a period of conflict pitting an established hegemon against an increasingly powerful challenger. I am not that pessimistic. In my view, economic and ecological interdependence reduces the probability of a real cold war, much less a hot one, because both countries have an incentive to cooperate in a number of areas. At the same time, miscalculation is always possible and some see the danger of ‘sleepwalking’ into catastrophe, as happened with World War I. History is replete with cases of misperception about changing power balances. For example, when US President Richard Nixon visited China in 1972, he wanted to balance what he saw as a growing Soviet threat to a declining America. But what Nixon interpreted as decline was really the return to normal of America’s artificially high share of global output after World War II. Nixon proclaimed multipolarity, but what followed was the end of the Soviet Union and America’s unipolar moment two decades later. Today, some Chinese analysts underestimate America’s resilience and predict Chinese dominance but this, too, could turn out to be a dangerous miscalculation. It is equally dangerous for Americans to over- or underestimate Chinese power, and the US contains groups with economic and political incentives to do both. Measured in dollars, China’s economy is about two-thirds the size of that of the US, but many economists expect China to surpass the US sometime in the 2030s, depending on what one assumes about Chinese and American growth rates. Will American leaders acknowledge this change in a way that permits a constructive relationship, or will they succumb to fear? Will Chinese leaders take more risks, or will Chinese and Americans learn to cooperate in producing global public goods under a changing distribution of power? Recall that Thucydides attributed the war that ripped apart the ancient Greek world to two causes: the rise of a new power and the fear that this created in the established power. The second cause is as important as the first. The US and China must avoid exaggerated fears that could create a new cold or hot war. Even if China surpasses the US to become the world’s largest economy, national income is not the only measure of geopolitical power. China ranks well behind the US in soft power and US military expenditure is nearly four times that of China. While Chinese military capabilities have been increasing in recent years, analysts who look carefully at the military balance conclude that China will not, say, be able to exclude the US from the Western Pacific. On the other hand, the US was once the world’s largest trading economy and its largest bilateral lender. Today, nearly 100 countries count China as their largest trading partner, compared to 57 for the US. China plans to lend more than US$1 trillion for infrastructure projects with its Belt and Road Initiative over the next decade, while the US has cut back aid. China will gain economic power from the sheer size of its market as well as its overseas investments and development assistance. China’s overall power relative to the US is likely to increase. Nonetheless, balances of power are hard to judge. The US will retain some long-term power advantages that contrast with areas of Chinese vulnerability. One is geography. The US is surrounded by oceans and neighbours that are likely to remain friendly. China has borders with 14 countries, and territorial disputes with India, Japan and Vietnam set limits on its hard and soft power. Energy is another area where America has an advantage. A decade ago, the US was dependent on imported energy, but the shale revolution transformed North America from energy importer to exporter. At the same time, China became more dependent on energy imports from the Middle East, which it must transport along sea routes that highlight its problematic relations with India and other countries. The US also has demographic advantages. It is the only major developed country that is projected to hold its global ranking (third) in terms of population. While the rate of US population growth has slowed in recent years, it will not turn negative, as in Russia, Europe, and Japan. China, meanwhile, rightly fears ‘growing old before it grows rich.’ China’s labour force peaked in 2015 and India will soon overtake it as the world’s most populous country. America also remains at the forefront in key technologies (bio, nano and information) that are central to 21st-century economic growth. China is investing heavily in research and development, and competes well in some fields. But 15 of the world’s top 20 research universities are in the US; none is in China. Those who proclaim Pax Sinica and American decline fail to take account of the full range of power resources. American hubris is always a danger but so is exaggerated fear, which can lead to overreaction. Equally dangerous is rising Chinese nationalism, which, combined with a belief in American decline, leads China to take greater risks. Both sides must beware of miscalculation. After all, more often than not, the greatest risk we face is our own capacity for error.

#### US-China Relations solves laundry list of existential threats.

Paulson 15, H. M. "Dealing with China: An insider unmasks the new economic superpower. Hachette Book Group." Inc.: All Books (2015). (Former US Treasury Secretary)//Elmer

One crisp day in early March 2014, I found myself sitting in a sleek conference room high above Boston Harbor taking questions from a group of financial executives. These men and women worked for a range of institutions that managed well over $3 trillion of financial assets, including the personal savings and pension funds of millions of Americans. They were keen to learn as much as they could about the Chinese economy. Was it about to hit the wall? Was I worried about a real estate bubble? How fragile was the country's financial system? Was the government serious about dealing with China's environmental problems? One fellow had a more personal question for me. "Hank," he said. "You're a real patriot. Why are you helping China?" The question pulled me up short. Three years before, when I first 'c began planning to write this book, I don't think I would have been asked anything like that at a meeting of sophisticated financiers. They would J have accepted that helping China to reform its economy, open its markets, protect its environment, and improve the quality of life of its people-all things I have been working on-would bring economic and strategic benefits to the U.S. as well. But that viewpoint has been changing as China has emerged as our biggest, most formidable economic competitor since the end of World War II and has started flexing its newfound military muscle in unsettling ways. As a result, many Americans, from all walks of life, have begun to view China with growing apprehension and resentment. Some would now prefer confrontation to cooperation. I understand these sentiments. Partly they are a function of China's choices and actions, and partly they are born of frustration with the recent economic troubles of the United States. I've spent a fair number of pages explaining how China must carry out meaningful economic reforms if it expects to continue its amazing success story. These arguments make sense for China and its people. But why should an American care? Why should we root for China to succeed? Shouldn't we instead be hoping that this ungainly giant stumbles, if only to slow down its daunting economic and military growth? In coming years China's weight and influence in the world, already substantial, is likely to begin to rival our own. Why take the chance now of helping the Chinese deal with so many of their problems and challenges? Why aid a competitor? The answer is simple: we should do so because it is more than ever in America's own self-interest that we do. To begin with, just about every major global challenge we face-from economic and environmental issues to food and energy security to nuclear proliferation and terrorism-will be easier to solve if the world's two most important economic powers can act in complementary ways. But these challenges will be almost impossible to address if the U.S. and China work at cross-purposes. If we want to benefit from an expanding global economy, we need the most dynamic growth engines, like China's, to thrive. If we want to prevent the worst climate change outcomes and to preserve our fragile global ecosystems, we need China to solve its massive environmental problems at home and adopt better practices abroad. If we want to keep diseases from our shores, we need Chinaand other countries to use the very best methods to prevent and halt epidemics. If we want to stem the spread of dangerous weapons to those who might harm our citizens, we need nations, including China, to work together to end illicit trafficking. If we want all these things to happen, we must be proactive, frank, and at times forceful with the Chinese while seeking ways to cooperate, to develop complementary policies, and to work to more fully integrate them into a rules-based global order. If we attempt to exclude, ignore, or weaken China, we limit our ability to influence choices made by its leaders and risk turning the worst-case scenarios of China skeptics into a self-fulfilling reality.

## 3

### T

#### Interpretation: the affirmative must only defend that the appropriation of space by private entities is unjust.

#### China’s "private" sector companies aren't private.

Olson 20 [Stephen Olson, research fellow at the Hinrich Foundation. "Are Private Chinese Companies Really Private?" The Diplomat, 9-30-2020, accessed 1-14-2022, https://thediplomat.com/2020/09/are-private-chinese-companies-really-private/]

Such is the case with China’s “Opinion on Strengthening the United Front Work of the Private Economy in the New Era,” recently released by the Central Committee of the Chinese Communist Party (and further elaborated on by President Xi Jinping himself). This document tells us in no uncertain terms that Chinese private companies will be increasingly called upon to conduct their operations in tight coordination with governmental policy objectives and ideologies. The rest of the world should take note. A Different Vision of “Private” Business The 5,000 word “opinion” aims to ratchet-up the role and influence of the CCP within the private sector in order “to better focus the wisdom and strength of the private businesspeople on the goal and mission to realize the great rejuvenation of the Chinese nation.” The objective is to establish a “united front” between business and government and facilitate the “enhancement of the party’s leadership over the private economy.” According to the plan, “private economic figures are to be more closely united around the party,” thereby achieving “a high degree of consistency with the Party Central Committee on political stand, political direction, political principles, and political roads.

#### Standards –

#### 1] Limits – They skirt the core controversy of the topic which is national vs private space activities – kills stasis point and pre-round prep and means we lose access to generics that rely on the motives of private companies differing from national interest proven by the fact that their advantage is functionally China space good/bad. Justifies the NASA Aff, ISS aff, ESA Aff, US Aff, literally any other country, or combo of countries making it impossible to negate.

#### Paradigm Issues –

#### a] Topicality is Drop the Debater – it’s a fundamental baseline for debate-ability.

#### b] Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### c] No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education

## 4

### DA

#### Chinese appropriation is at the crux of the BRI – plan makes infrastructure expansion impossible and wrecks the basis of the BRI.

Davis 17 (, M., 2017. The coming of China’s Space Silk Road | The Strategist. [online] The Strategist. Available at: <https://www.aspistrategist.org.au/coming-chinas-space-silk-road/> [Accessed 20 January 2022] Dr. Malcolm Davis joined ASPI as a Senior Analyst in Defence Strategy and Capability in January 2016.)-rahulpenu

The coming of China’s Space Silk Road China looks set to add a ‘Space Silk Road’ to its proposed land-based Silk Road Economic Belt and the 21st-Century Maritime Silk Road, expanding the Belt and Road Initiative (BRI; formerly known as One Belt, One Road) into orbit. At the heart of the Space Silk Road, BRI states would subscribe to use China’s Beidou satellites for precision navigation and timing services. China had 23 operational satellites in orbit as of 2016 and continues to expand the Beidou system. Precision navigation and timing (PNT) satellites like Beidou are key enabling technologies that can drive local economies and coordinate communications. Such systems enable (PDF) diverse applications including mobile devices, and the use of precision timing can support stock market applications and financial services, coordinate rail and marine transportation management, and support mining, among many other industries. The 2016 Chinese white paper on space activities emphasises the importance of Beidou, stating: With sustained efforts in building the Beidou global system, we plan to start providing basic services to countries along the Silk Road Economic Belt and 21st-Century Maritime Silk Road in 2018, form a network consisting of 35 satellites for global services by 2020, and provide all clients with more accurate and more reliable services through advancing the ground-based and satellite-based augmentation systems in an integrated way. (Part III, section 2 ‘Space infrastructure’) It then goes on to specifically mention the concept of a Space Silk Road, announcing plans to establish a ‘Belt and Road Initiative Space Information Corridor’, which would include: earth observation, communications and broadcasting, navigation and positioning, and other types of satellite-related development; ground and application system construction; and application product development. (Part V, section 3 ‘Key areas for future cooperation’) A China Real Time Report in the Wall Street Journal refers to **Beidou** **as the ‘digital glue’ for the roads**, **railwa**ys, ports **and** **industrial** **parks** that China builds to extend its presence and influence. Chinese provision of satellite communications, weather monitoring and earth observation add to this vision for a Space Silk Road that overarches and underpins the Belt and Road Initiative. By signing up to the BRI ‘Space Information Corridor’, the BRI states would become dependent on Chinese-provided space services. That would give Beijing greater power to influence the policy choices of those states, because it would control the vital space capabilities that **sustain** their economic **growth**.

#### Solves Central Asian and South Asia War.

Muhammad et Al 19, Imraz, Arif Khan, and Saif ul Islam. "China Pakistan Economic Corridor: Peace, Prosperity and Conflict Resolution in the Region." (Lecturer, Department of Political Science, University of Buner)//Elmer

In the twenty first century, the geostrategic importance of South Asia is rising because of the China Pakistan Economic Corridor (CPEC) which is the important component of the **o**ne **b**elt **o**ne **r**oad initiative (BRI). CPEC, started point is Gawadar a deep water port connects to the China‘s province of Xinjiang. Being part of the BRI, once CPEC is completely started functioning, it **will improve** the **political, social and economic situation** of the regional states and will raise the geo-strategic importance. CPEC is the priority of both states China and Pakistan, for Pakistan, CPEC pass through Pakistan‘s geography, is outlet for the landlocked countries and provides access to the supply and demands market to regional countries, while it is very short route for China, CPEC replace 13000 km only into 2500 km to reach to Middle East.1 So both the states have an instinct desire to continue it irrespective of change in the government. Not only this, CPEC will **boost** up the **regional** states‘ **economy**, **ensure peace** and prosperity in the region. Political, social and economic degradation in South Asia, created a hurdle in the cooperation among the regional countries. Security issues, terrorism, over population, economic disparities, lacking of education and modern inventions, lacking of health facilities, poor economic setup, water issues etc. devastated the life style and hindered the progress, development and peace in the region. CPEC is a turning point in the history of Asians‘ countries, it is not only a game changer and a target for Pakistan and China but a project for the whole region. Goal of this project is to promote commerce and trade culture, integrate the regional states for the development of economy, agriculture and industries. Furthermore, it is a source of peace, prosperity and conflicts resolutions in the region through economic development, economic dependence and regional integration. CPEC is a sign of peace and affluence for the whole region as for Pakistan. Being economic zone it will bring political, social and especially economic growth in the region. However, this research work deals with analyse the CPEC role in bringing peace and prosperity on the one hand and led to conflict resolution in South Asia on the other hand. What is CPEC? The CPEC is the part of one belt, one road has featuring of common advantages and prosperity, containing on complimentary interest, cooperation and collaboration and mutual benefits. A widespread transport corridor, industrial and trade cooperative rout between China and Pakistan, having the potential of people to people contact and communication, sources of cultural diffusion and exchange. Additionally, CPEC has the ability of political, social and economic growth, bringing peace, prosperity and security in region2 The CPEC covers the areas starting from a muslim majority province Xinjiang Uygur in China and almost all provinces Pakistan. Main areas through which CPEC passes are Kashgar, Atushi, Tumshuq, Shule, Shufu, Akto, Tashkurgan Tajik, Gilgit, Peshawar, Dera Ismail Khan, Islamabad, Lahore, Multan, Quetta, Sukkur, Hyderabad, Karachi and Gwadar. Furthermore, the CPEC will comprise one belt, three passageways, and two axes and five functional zones. Peace, Prosperity and Conflict Resolutions Narrowly peace is defined as the passivity and acceptance of injustice and cruelty without showing reaction.3 It may also be turn as the complete absence of war which simply fall in the negative peace category, but actually **peace** is more than that, it is **based on the political,** social **and economic development** of society and elimination of the injustice, and violations of the human rights.4 More elaborately, peace focused on the modern concept of democracy, liberalism and postmodern society, which is really related to the deconstruction of the parochial society, snatch powers from single body and share with rest of the society, where there is popular democracy is observed. Where there is no exploitation of the individual and restriction on the abusive use of the authorities.5 Nonviolence, the philosophy of Gandhi and Bacha Khan, is the part of positive peace, where there is no violation of the law, demand for rights under the shadow of law, no threats are used during protest and strikes. So, by this way there is risk for the conflicts, violations and war. Demand for right by using violence fall under the umbrella of negative peace. Jonathan Schell fruitfully summarised the dilemma of non-violence as cooperation, collective action consist on the mutual consent against abusive and parochial power and compel those actions which are taken against them.6 However, it is a very emotive term which has many heads and tails has not absolute end, in short the think tankers are in seeking to find easy way to bring cooperation, consensus, mediations, resolutions and more effective ways to resolve the issues and disputes, and transform the causes of war into peace. Perpetual peace is possible in resolving the conflicts, but due to anarchy in the international community, there is conflict. Disagreements, irrational demands, denial and counter claim leads to conflicts. So, prevention of the conflicts, mediation, management and resolution fascinated the international community, because the cost of war and conflicts is higher. For the conflict resolution, various methods are used as the tactics of good offices, arbitration, enquiry, negotiation, problem setting workshop, second track diplomacy, reconciliation and judicial settlement.7 However, conflict resolution depends upon clear assurance from all parties. CPEC Role in Bringing Peace and Prosperity & Peace through Economic Growth & Regional Integration: Political, social and economic interdependence society, reduce the chances of conflicts and war. Liberal thinkers probe out that **free trade and** economic **interdependence** flourish peace and **eliminate** the risk of **militancy**. The theory of Economic Opportunity Cost Hypothesis investigated that economic interdependence increase the level of integration among nations, consequently there is the eruption of peace and alleviated the condition of war8 . Economically weak states, where is economically disintegrated states are mostly enhanced in conflicts with each other. So, it is the benefits of trade globalization which decreases conflicts among nations. The theory of Neo-Functionalism which discussed norms and values of the Europe integration, has focused that cooperation and harmonization in one sector open the routes of another for the cooperation.9 Where, further expansion of the chain of integration, cooperation and as a result peace enhances in society. Like European states, Afghanistan, Iran, India, **Pakistan**, China **and** other **central Asian states** **have** the **capacity of regional integration** through CPEC. The CPEC has the potential of cooperation, integration, economic growth, and forged unity among regional states. According to the norms of NeoFunctionalism, CPEC provides an opportunity of free trade, economic dependence, transportation and regional integration through functional cooperation. **South Asia** is the **most exacerbated region** in the world, because of militancy, conflicts, overpopulation, less development, lacking of education and specially the arm race among nations. Terrorism in the region (Afghanistan and Pakistan) created security dilemma and furthermore the conflicts of Pakistan and India over Kashmir worsen the situation, which disturb the economic chain in the region for a long time. **CPEC** **bestowed the best opportunity to resolve the conflicts** and created peace through geo-economics and geo-politics. This corridor has the capacity to create economic interdependence in the region and regional integration because of functional cooperation based on common interest and needs.10 CPEC network connected the regional and extra-regional countries through, economic trade, liberalization of economy, free policies and open membership, to get advancement in commerce and trade on global level.11 Being part of the of the Belt and Road Initiative (BRI), CPEC has the capacity to **interconnect** China, **Pakistan**, Iran, **India**, Afghanistan, **Central Asia**, West Asia, not only this other states of the Central Asia are also may connected with this corridor through India. After Passing through Asia, CPEC enter into Europe through ―One Belt, One Road‖ strategy.12 By this way CPEC created cooperation among adjacent and de-adjacent countries, and lead to peace and prosperity through economic dependence, as the China‘s Assistant Foreign Minister opined that peace, prosperity and economic development of CPEC not only limited to China and Pakistan but to the whole region.13 Similar view has been presented by the Ex-PM Nawaz Sharif during his visit to Turkmenistan, CPEC would be beneficial for everyone in the region in the socio-economic perspective, as he said that ―CPEC will offer opportunities for hundreds of millions of people.‖ But it is necessary to promote peace in the region because without peace, development remains just words on the tongue, as he further mentioned that peace and prosperity are connected with each other. Furthermore, flourishing the popular concept of happiness and prosperity Nawaz Sharif added, that my government will ensure Regional integration and connectivity. It will help us to work together towards pursuing our common objective of strengthening peace and bringing development in our region. In fact CPEC is an opportunity where Pakistan and other countries of the region have to work for the betterment of our people.‖14 So, through integration of the regional states, CPEC has a great role in the flourishing of the peace, prosperity and development in the region. The issue of terrorism, militancy, Kashmir disputes, crimes as piracy, human trafficking and problems around the Indian Oceans, are created severe affection over the region regarding international trade and commerce, crumpling of economy and security threats. These issues also devastating the security and economic situation of Pakistan, therefore, responding to these devastating issues is one of the foremost priorities of Pakistan and China. ChinaPakistan adopted joint struggle for the fortification of their maritime security to bring peace and stability in the region and secure the CPEC from insecurity.15

#### Goes Nuclear and causes Extinction.

Menon 19 Prakash Menon, The nuclear cloud hanging over the human race, Nov 15, 2019, [PhD from Madras University for his thesis “Limited War and Nuclear Deterrence in the Indo-Pak context”] [https://www.telegraphindia.com/opinion/the-nuclear-cloud-hanging-over-the-human-race/cid/1719608#](https://www.telegraphindia.com/opinion/the-nuclear-cloud-hanging-over-the-human-race/cid/1719608) SM

The nuclear cloud hanging over the human race Even a limited India-Pakistan nuclear conflict could pose an existential challenge to life on Earth The smoke injected into the stratosphere due to a nuclear attack would block the sunlight and result in a ‘Nuclear Winter' - freezing temperatures that pose an existential threat. One study estimates that in an India-Pakistan exchange, the immediate casualties could number 125 million lives The smoke injected into the stratosphere due to a nuclear attack would block the sunlight and result in a ‘Nuclear Winter' - freezing temperatures that pose an existential threat. One study estimates that in an India-Pakistan exchange, the immediate casualties could number 125 million lives iStock Prakash Menon | | Published 15.11.19, 08:04 PM With the recent administrative changes in Jammu and Kashmir, Indo-Pak hyphenation has come back to haunt India’s aspirations to break out of that narrow mould and be perceived as an independent player on the global stage. The clubbing of India with Pakistan is an echo of India’s political and strategic confinement to the sub-continent. Pakistan has always attempted to paint the Indo-Pak situation as a nuclear flashpoint essentially to invite international intervention in what India insists is a bilateral issue. A recent report in the Bulletin of Atomic Scientists by Toon et al entitled 'How an India-Pakistan Nuclear War Could Start and have Global Consequences' provides grist to the mill of the nuclear flashpoint theory. But it also raises an issue that has yet not found its place in the public imagination nor has sufficient cognisance been taken by the political and military leadership of nuclear weapon powers – the climatic consequences of nuclear explosions. It is well known that nuclear powers have and continue to base their targeting requirements of nuclear weapons on calculations that are restricted mostly to the major but immediate effects of nuclear explosions – blast, heat and radiation. According to General Lee Butler, the former United States, Strategic Forces Commander, during the cold war, the Standard Integrated Operation Plan (SIOP) had targeted Moscow with 400 nuclear weapons and Kiev with 40. Several scientific studies of the impact of nuclear explosions since the 1980s up to the present which utilises advanced computer models, confirm the effect of smoke injected into the stratosphere that would block sunlight from reaching the earth’s surface and is described as ‘Nuclear Winter’. In essence global temperatures would plunge below freezing point thus posing threats to life support systems especially food production. In short, it threatened human existence itself. Later studies that focused on regional nuclear wars especially in the Indo-Pak context, have indicated that the impact of a nuclear exchange would have an immediate significant and catastrophic impact in terms of death and destruction. The latest Toon study, estimates that in a situation where around 350 warheads are used by India and Pakistan, the immediate casualties would vary between 50 to 125 million lives depending on the yields of the weapons used which could vary between 15-100 Kilotons. (a Kiloton being the explosive equivalent power of 1000 tons of TNT). Such scales and speeds of destruction for both parties would indeed be of an existential nature. Therefore, both India and Pakistan despite the rhetoric during times of tension have so far displayed caution and refrained from getting into situations where nuclear weapons are alerted. The speedy de-escalation after Balakot is indicative of a cautionary approach. Of course, this is no guarantee that the next round would not witness a different outcome. For as long as nuclear weapons exist in the arsenals of both countries, the possibility of use remains, however low the probability. It is now well known (but widely ignored by the strategic cognoscenti) that even a regional Indo-Pak nuclear war with hundreds of low yield nuclear explosions can also pose an existential threat at the global level. The latest study states “In the India-Pakistan scenario, we calculated a total of 16.1 TG (1 TG is equivalent of one million tons of smoke) of black carbon injected into the upper atmosphere (11 from India and 5.1 from Pakistan) for weapons with yields of 15 kilotons; 27.3 TG (19.8 from India and 7.5 from Pakistan) for 50 kiloton weapons; and 36.6 TG (27.5 from India and 9.1 from Pakistan) for 100 kiloton weapons. The smoke would be heated by sunlight and lofted high into the stratosphere, where it could remain for years, since it does not rain in the stratosphere”. The Climate Model indicates that global average temperatures and precipitation would be significantly lowered and comparisons are drawn to the ice age that prevailed thousands of years ago. Agriculture around the world would be impacted and billions of people could face starvation. In earlier studies, even 5 TG of smoke produced (which is one third of what is expected in a lower scale Indo-Pak conflict), food production would change in China and the US for specific crops causing widespread shortages at the global level. Moreover, the ozone layer would be degraded as the rising smoke absorbs the sunlight and heats up the stratosphere that would permit ultra-violet rays of greater magnitude to reach the earth causing negative effects. The political and strategic implications of the long-term impact on climate change challenges the foundations of the edifice on which nuclear weapon strategy has been constructed. It is obvious that any deliberate initiation of nuclear war has a high probability of posing an existential threat to humanity. Even with the achievement of the complete destruction of an adversary’s arsenal through a first strike, the initiator cannot itself escape the existential threat posed by long term climate change. This indicates that the First Use doctrine in the name of strengthening deterrence stands fully exposed for its incredibility and the utter stupidity of the use of nuclear weapons.

## 5

### DA

#### China’s space program is key to asteroid mitigation---US efforts fail and the same entities referenced in AC Patel and AC Chow are key.

Chen 21 (, S., 2021. How 23 giant Chinese rockets could save world from asteroids. [online] South China Morning Post. Available at: <https://www.scmp.com/news/china/science/article/3139914/how-23-giant-chinese-rockets-could-save-world-doomsday-asteroid> [Accessed 19 January 2022] Stephen Chen investigates major research projects in China, a new power house of scientific and technological innovation. He has worked for the Post since 2006. He is an alumnus of Shantou University, the Hong Kong University of Science and Technology, and the Semester at Sea programme which he attended with a full scholarship from the Seawise Foundation.)-rahulpenu

How 23 giant Chinese rockets could save the world from ‘doomsday’ asteroid China can send mammoth machines into space which travel for years then deflect problematic rocks Same devices have been criticised recently because one plummeted back to Earth in uncontrolled re-entry **China’s** **space** **programme** **could** one day **save** **the** **world**, with massive rockets travelling for years to defend the planet from huge asteroids capable of wiping out entire cities, according to a government-backed study. This saviour role is unexpected given these are the same machines seen as a threat by many, including the United States, just weeks ago; the main 20-tonne section from one such rocket fell back to Earth in May in an uncontrolled re-entry. It fell into the sea or burned up beforehand, although last year fragments from another rocket were said to have hit two villages in the West African country, Ivory Coast. Now a new government-funded study says China can launch 23 Long March 5 (CZ-5) rockets – the largest in its fleet, weighing almost 900 tonnes on take-off – to break up the rocky objects in our solar system. Some asteroids are as small as pebbles but others are hundreds of kilometres across. An asteroid about 500 metres (1,640 feet) wide could kill millions. Although the chance of one colliding with the Earth is currently low, there is one called Bennu which could hit in about a century. Researcher Li Mingtao and his colleagues at the National Space Science Centre in Beijing have been commissioned to find out how China can step in and try to ensure humans do not go the way of the dinosaurs. The asteroid that led to their extinction was around 10km (6 miles) wide. To change the course of a giant asteroid hurtling towards us at terrifying speeds, a lot of kinetic energy would be needed. Nuclear weapons might do the job but such a blast could break the target into several threatening chunks. In their proposal, the space centre team suggested launching 23 CZ-5 rockets from various sites across China, at the same time. The spacecraft would have to travel for almost three years to reach their target. On top of each rocket would be a deflector, a device designed to avoid breaking up the asteroid. Each rocket would “hit” the asteroid, one after another, by way of a gentle nudge. This would only change the course of a Bennu-sized asteroid slightly, but enough to make it pass safely at a distance about 1.4 times the radius of the Earth and **save** some cities **from** **annihilation**, according to Li’s calculations. “[It is] possible to defend against large asteroids with a nuclear-free technique within 10 years,” said Li and colleagues in a June paper published in Icarus , an international journal for solar system studies. The CZ-5 is the **backbone** **of** **China’s** space **programme**, a more-than-handy workhorse used in space station construction and Mars exploration. The problem is its size becomes an issue during free fall back to Earth, travelling at thousands of miles an hour. Western authorities including the US Space Force have said they carefully tracked each CZ-5 after each launch. In May US Defence Secretary Lloyd Austin hoped the rocket of concern at the time would “land in a place where it will not harm anyone. Hopefully in the ocean, or someplace like that.” He also said there was a need to make sure “those kinds of things” were taken into consideration when planning and conducting operations. Some Western media warned readers that the debris might hit big cities. That did not happen but led to an increased focus on China’s responsibility as a space power. In the Icarus paper Li and his colleagues said fuel not used during the rocket launch could give extra thrust during the flight towards an asteroid, and the rocket fuselage also increased the total mass of the deflector. They said existing rockets only had to undergo small modifications such as adding a few small thrusters. A similar mission proposed by researchers with Nasa and California’s Lawrence Livermore National Laboratory in 2018 would require the launch of 75 Delta IV heavy rockets, according to the two organisations and mentioned by Li. Known as HAMMER (Hypervelocity Asteroid Mitigation Mission for Emergency Response), the US plan would deliver more than 400 tonnes of deflectors, nearly twice as many as in the Chinese proposal, but with a flight time nearly a year shorter, to achieve similar results. The US mission would be more expensive than the Chinese one, Li said. The Chinese plan also needs less preparation time. While the American approach would need to discover an asteroid 25 years before its potential collision with Earth, China’s plan could cut the lead time to just a decade. Overall, the Chinese **approach**, involving what is called the Assembled Kinetic Impactor, could **greatly** **improve** deflection **efficiency** **and** **reduce** both **launch** **costs** **and** **lead** **time**, the paper said. A space scientist at Beijing’s Tsinghua University said competition between China and the US would accelerate the development of space technology. “The problem is, when the doomsday threat comes, politics may override science and lots of time may be wasted on debates to decide which country should take the lead,” said the researcher, who did not want to be named because of the sensitivity of the issue. China has been challenging US dominance in space for some time. It already has a rover on Mars, is building a space station, exploring the far side of the moon and studying lunar samples recently retrieved by robots. The US launched its first asteroid defence programme decades ago. It has the only asteroid-warning radar system on Earth and one of its spacecraft is returning home after obtaining samples from Bennu, the asteroid that could hit us in about a century. In 2025 China is expected to launch its own spacecraft to retrieve asteroid samples. China is also building a planetary defence system with what will be the most powerful radar in the world, according to researchers involved in the project. It will be made up of large radio telescopes across the country and be able to track more targets than its US counterpart.

#### Asteroid strikes are likely and cause extinction

Casey,6/30/15 – environmental, scientific, and technological reporter for CBS News (Michael, “On Asteroid Day, raising awareness that Earth could get hit again”, CBS News, <http://www.cbsnews.com/news/asteroid-day-raising-awareness-earth-could-be-hit-by-asteroids/>, //11)

"Asteroids are the only natural disaster we know how to prevent and protecting our planet, families and communities is the goal of Asteroid Day," said Grigorij Richters, producer of the asteroid-themed movie "51 Degrees North" and co-founder of Asteroid Day. "Asteroids teach us about the origins of life, but they also can impact the future of our species and life on Earth." Most of what people know about asteroids comes from movies like "Deep Impact" or "Armageddon," or because they've heard that an asteroid triggered global disasters that led to the extinction of the dinosaurs 65 million years ago. But asteroids are not just the stuff of science fiction or ancient history. In January, a huge asteroid passed close to Earth - within 745,000 miles (1.2 million kilometers) of our planet. NASA said it was the closest any space rock is expected to come to Earth until asteroid 1999 AN10 flies past in 2027, but there could be other close calls scientists aren't expecting. In 2013, an asteroid exploded over Chelyabinsk, Russia - creating a fireball brighter than the sun and an explosion that was as powerful as about 40 Hiroshima-type bombs. NASA seems to concur that the threat has to be taken seriously. Earlier this month, NASA signed a deal with the National Nuclear Security Administration to look into the nuclear option should they discover that an asteroid was on a collision course with Earth. The space agency currently only tracks about 10 percent of the 1 million asteroids in our solar system with the potential to strike Earth, according to Asteroid Day.org. The European Space Agency, meanwhile, convened a meeting Tuesday with emergency response officers from Switzerland, Germany, Luxembourg, Romania, Sweden and the United Kingdom to discuss how to respond to the asteroid threat. "Planets can't hit us, while comet debris doesn't survive to strike our surface. But asteroids -- chunks of stone or metal -- arrive by the thousands every day, and are responsible for nearly all of the 50,000 catalogued meteorites," Slooh astronomer Bob Berman said. "The largest asteroids are fascinating to observe, while the hazardous ones need to be watched while defenses are being conceived." In December, astrophysicist Dr. Brian May (who was also a founding member and lead guitarist of the rock band Queen) joined Lord Martin Rees, UK Astronomer Royal; Bill Nye, the Science Guy; and astronauts Rusty Schweickart, Ed Lu and Tom Jones to launch Asteroid Day. In their mission statement, they said their goal was nothing short of ensuring the survival of future generations. As part of that, they also announced the 100X Declaration, which calls for a 100-fold increase in detection and monitoring of asteroids. "The more we learn about asteroid impacts, the clearer it becomes that the human race has been living on borrowed time," May said. "Asteroid Day and the 100X Declaration are ways for the public to contribute to bring about an awareness that we can get hit anytime. A city could be wiped out any time because we just don't know enough about what's out there."

## Case

### 1NC – Debris

#### McKnight is talking about status quo debris from current dust and rockets – inserted the table below – their evidence isn’t predictive, it’s descriptive – means current dust thumps.

McKnight 17 Dr. Darren McKnight 17, Ph.D., Technical Director for Integrity Applications, Previously Senior Vice President and Director of Science and Technology Strategy at Science Applications International Corporation, “Proposed Series of Orbital Debris Remediation Activities,” 3rd International Conference and Exhibition on Satellite & Space Missions, 5/13/2017, https://iaaweb.org/iaa/Scientific%20Activity/debrisminutes03166.pdf [graphics omitted]

Table

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#### Starlink thumps – their interntal links to debris are quantity of satellites and disregard for rules of engagement which are non uq

Pultarova 21 “SpaceX Starlink satellites responsible for over half of close encounters in orbit, scientist says” Tereza Pultarova [Master's in Science from the International Space University, France, to her Bachelor's in Journalism and Master's in Cultural Anthropology from Prague's Charles University. She worked as a reporter at the Engineering and Technology magazine, freelanced for a range of publications including Live Science, Space.com, Professional Engineering, Via Satellite and Space News and served as a maternity cover science editor at the European Space Agency.], August 18, 2021 <https://www.space.com/spacex-starlink-satellite-collision-alerts-on-the-rise> SM

SpaceX Starlink satellites responsible for over half of close encounters in orbit, scientist says Starlink satellites might soon be involved in 90% of close encounters between two spacecraft in low Earth orbit. Operators of satellite constellations are constantly forced to move their satellites because of encounters with other spacecraft and pieces of space junk. And, thanks to SpaceX's Starlink satellites, the number of such dangerous approaches will continue to grow, according to estimates based on available data. SpaceX's Starlink satellites alone are involved in about 1,600 close encounters between two spacecraft every week, that's about 50 % of all such incidents, according to Hugh Lewis, the head of the Astronautics Research Group at the University of Southampton, U.K. These encounters include situations when two spacecraft pass within a distance of 0.6 miles (1 kilometer) from each other. Lewis, Europe's leading expert on space debris, makes regular estimates of the situation in orbit based on data from the Socrates (Satellite Orbital Conjunction Reports Assessing Threatening Encounters in Space ) database. This tool, managed by Celestrack, provides information about satellite orbits and models their trajectories into the future to assess collision risk. Lewis publishes regular updates on Twitter and has seen a worrying trend in the data that reflects the fast deployment of the Starlink constellation. "I have looked at the data going back to May 2019 when Starlink was first launched to understand the burden of these megaconstellations," Lewis told Space.com. "Since then, the number of encounters picked up by the Socrates database has more than doubled and now we are in a situation where Starlink accounts for half of all encounters." The current 1,600 close passes include those between two Starlink satellites. Excluding these encounters, Starlink satellites approach other operators’ spacecraft 500 times every week.

Chart, line chart

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A graph showing the growing number of close encounters in space involving Starlink satellites as plotted by Professor Hugh Lewis using data from the Socrates database. (Image credit: Hugh Lewis) In comparison, Starlink's competitor OneWeb, currently flying over 250 satellites, is involved in 80 close passes with other operators' satellites every week, according to Lewis' data. And the situation is bound to get worse. Only 1,700 satellites of an expected constellation of tens of thousands have been placed into orbit so far. Once SpaceX launches all 12,000 satellites of its first generation constellation, Starlink satellites will be involved in 90% of all close approaches, Lewis’ calculations suggest.

**Chart, line chart

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A graph showing the number of close encounters between Starlink satellites and spacecraft of other operators plotted by Professor Hugh Lewis based on data from the Socrates database. (Image credit: Hugh Lewis) The risk of collision Siemak Hesar, CEO and co-founder of Boulder, Colorado, based Kayhan Space, confirms the trend. His company, which develops a commercial autonomous space traffic management system, estimates that on average, an operator managing about 50 satellites will receive up to 300 official conjunction alerts a week. These alerts include encounters with other satellites as well as pieces of debris. Out of these 300 alerts, up to ten might require operators to perform avoidance maneuvers, Hesar told Space.com. Kayhan Space bases their estimates on data provided by the U.S. Space Surveillance Network. This network of radars and telescopes, managed by the U.S. Space Force, closely monitors about 30,000 live and defunct satellites and pieces of debris down to the size of 4 inches (10 centimeters) and provides the most accurate location data of the orbiting objects. The size of this catalog is expected to increase ten times in the near future, Hesar added, partly due to the growth of megaconstellations, such as Starlink, and partly as sensors improve and enable detection of even smaller objects. The more objects in the catalog mean more dangerously close encounters. "This problem is really getting out of control," Hesar said. "The processes that are currently in place are very manual, not scalable, and there is not enough information sharing between parties that might be affected if a collision happens." Hesar compared the problem to driving on a highway and not knowing that there has been an accident a few miles ahead of you. If two spacecraft collide in orbit, the cloud of debris the crash generates would threaten other satellites travelling through the same area. "You want to have that situational awareness for the other actors that are flying in the neighbourhood," Hesar said. Bad decisions Despite the concerns, only three confirmed orbital collisions have happened so far. Earlier this week, astrophysicist and satellite tracker Jonathan McDowell, who's based at the Harvard-Smithsonian Center for Astrophysics in Cambridge, Massachusetts, found evidence in Space-Track data that the Chinese meteorological satellite Yunhai 1-02, which disintegrated in March this year, was actually hit by a piece of space debris. The worst known space collision in history took place in February 2009 when the U.S. telecommunication satellite Iridium 33 and Russia's defunct military satellite Kosmos-2251 crashed at the altitude of 490 miles (789 kilometres). The incident spawned over 1,000 pieces of debris larger than 4 inches (10 cm). Many of these fragments were then involved in further orbital incidents. Lewis is concerned that with the number of close passes growing, the risk of operators at some point making a wrong decision will grow as well. Avoidance maneuvers cost fuel, time and effort. Operators, therefore, always carefully evaluate such risks. A decision not to make an avoidance maneuver following an alert, such as that made by Iridium in 2009, could, however, clutter the orbital environment for years and decades. "In a situation when you are receiving alerts on a daily basis, you can't maneuver for everything," Lewis said. "The maneuvers use propellant, the satellite cannot provide service. So there must be some threshold. But that means you are accepting a certain amount of risk. The problem is that at some point, you are likely to make a wrong decision." Hesar said that uncertainties in the positions of satellites and pieces of debris are still considerable. In case of operational satellites, the error could be up to 330 feet (100 meters) large. When it comes to a piece of debris, the uncertainty about its exact position might be in the order of a mile or more. "This object can be anywhere in this bubble of multiple kilometres," Hesar said. "At this point, and for the foreseeable future, avoidance is our best recourse. People that say 'I'm going to take the risk', in my humble opinion, that's an irresponsible thing to do." Starlink monopoly Lewis is concerned about the growing influence of a single actor — Starlink — on the safety of orbital operations. Especially, he says, as the spaceflight company has entered the satellite operations world only recently. "We place trust in a single company, to do the right thing," Lewis said. "We are in a situation where most of the maneuvers we see will involve Starlink. They were a launch provider before, now they are the world's biggest satellite operator, but they have only been doing that for two years so there is a certain amount of inexperience." SpaceX relies on an autonomous collision avoidance system to keep its fleet away from other spacecraft. That, however, could sometimes introduce further problems. The automatic orbital adjustments change the forecasted trajectory and therefore make collision predictions more complicated, according to Lewis. "Starlink doesn't publicize all the maneuvers that they're making, but it is believed that they are making a lot of small corrections and adjustments all the time," Lewis said. "But that causes problems for everybody else because no one knows where the satellite is going to be and what it is going to do in the next few days."

### 1NC – Hegemony

#### Empirics go neg – most qualified studies disprove hegemonic stability theories.

Fettweis 17 –Christopher J. Fettweis is an American political scientist and the Associate Professor of Political Science at Tulane University. “Unipolarity, Hegemony, and the New Peace, Security Studies” 26:3, 423-451; EG)

Even the most ardent supporters of the hegemonic-stability explanation do not contend that US influence extends equally to all corners of the globe. The United States has concentrated its policing in what George Kennan used to call “strong points,” or the most important parts of the world: Western Europe, the Pacific Rim, and Persian Gulf.64 By doing so, Washington may well have contributed more to great power peace than the overall global decline in warfare. If the former phenomenon contributed to the latter, by essentially providing a behavioral model for weaker states to emulate, then perhaps this lends some support to the hegemonic-stability case.65 During the Cold War, the United States played referee to a few intra-West squabbles, especially between Greece and Turkey, and provided Hobbesian reassurance to Germany’s nervous neighbors. Other, equally plausible explanations exist for stability in the first world, including the presence of a common enemy, democracy, economic interdependence, general war aversion, etc. The looming presence of the leviathan is certainly among these plausible explanations, but only inside the US sphere of influence. Bipolarity was bad for the nonaligned world, where Soviet and Western intervention routinely exacerbated local conflicts. Unipolarity has generally been much better, **but whether or not this was due to US action is again unclear.** Overall US interest in the affairs of the Global South has dropped markedly since the end of the Cold War, as has the level of violence in almost all regions. There is less US intervention in the political and military affairs of Latin America compared to any time in the twentieth century, for instance, and also less conflict. Warfare in Africa is at an all-time low, as is relative US interest outside of counterterrorism and security assistance.66 **Regional peace and stability exist where there is US active intervention, as well as where there is not**. No direct relationship seems to exist across regions. If intervention can be considered a function of direct and indirect activity, of both political and military action, a regional picture might look like what is outlined in Table 1. These assessments of conflict are by necessity relative, because there has not been a “high” level of conflict in any region outside the Middle East during the period of the New Peace. Putting aside for the moment that important caveat, some points become clear. The great powers of the world are clustered in the upper right quadrant, where US intervention has been high, but conflict levels low. **US intervention is imperfectly correlated with stability, however. Indeed, it is conceivable that the relatively high level of US interest and activity has made the security situation in the Persian Gulf and broader Middle East worse.** In recent years, substantial hard power investments (Somalia, Afghanistan, Iraq), moderate intervention (Libya), and reliance on diplomacy (Syria) have been equally ineffective in stabilizing states torn by conflict. While it is possible that the region is essentially unpacifiable and no amount of police work would bring peace to its people, it remains hard to make the case that the US presence has improved matters. **In this “strong point,” at least, US hegemony has failed to bring peace.** In much of the rest of the world, the United States has not been especially eager to enforce any particular rules. Even rather incontrovertible evidence of genocide has not been enough to inspire action. Washington’s intervention choices have at best been erratic; Libya and Kosovo brought about action, but much more blood flowed uninterrupted in Rwanda, Darfur, Congo, Sri Lanka, and Syria. The US record of peacemaking is not exactly a long uninterrupted string of successes. During the turn-of-the-century conventional war between Ethiopia and Eritrea, a highlevel US delegation containing former and future National Security Advisors (Anthony Lake and Susan Rice) made a half-dozen trips to the region, but was unable to prevent either the outbreak or recurrence of the conflict. Lake and his team shuttled back and forth between the capitals with some frequency, and President Clinton made repeated phone calls to the leaders of the respective countries, offering to hold peace talks in the United States, all to no avail.67 The war ended Table 1. Post-Cold War US intervention and violence by region. High Violence Low Violence High US Intervention Middle East Europe South and Central Asia Pacific Rim North America Low US Intervention Africa South America Former Soviet Union in late 2000 when Ethiopia essentially won, and it controls the disputed territory to this day. The Horn of Africa is hardly the only region where states are free to fight one another today without fear of serious US involvement. Since they are choosing not to do so with increasing frequency, something else is probably affecting their calculations. Stability exists even in those places where the potential for intervention by the sheriff is minimal. Hegemonic stability can only take credit for influencing those decisions that would have ended in war without the presence, whether physical or psychological, of the United States. It seems hard to make the case that the relative peace that has descended on so many regions is primarily due to the kind of heavy hand of the neoconservative leviathan, or its lighter, more liberal cousin. Something else appears to be at work.

#### China’s not evil

Ambrosio et al. 19 -\*professor of political science in the Criminal Justice and Political Science Department at North Dakota State University, [Thomas Ambrosio, Carson Schram, Professor of Political Science at North Dakota State University and teaches courts on international politics and international law & Preston Heopfne, Department of Political Science, North Dakota State University, The American securitization of China and Russia: U.S. geopolitical culture and declining unipolarity, 2019, Eurasian Geography and Economics, DOI: 10.1080/15387216.2019.1702566, DKP]

China America’s post-Cold War China threat narrative has evolved significantly into one in which China’s growing capabilities have complemented its ambition to establish itself both as a great power with regional dominance and as a global actor – all in the service of transforming the current world order. As seen in Figure 1, 9 which illustrates the overall percentages of references in terms of source of threat, the China threat has been defined in aggregate by capabilities, either by itself or in combination with another source. Indeed, 44.6% of all references to the China threat defined it exclusively in terms of capabilities – i.e. not combined with any other source. One reason is that nearly 39% of all references were about China’s nuclear weapons or growing conventional assets. However, the aggregate view can be misleading, as seen in Figure 2, which details the data from Figure 1 annually. It shows that there were five distinct periods in which references to intentions spiked: 1996-1998, 2001, 2010, 2012, and 2018–2019.10 These corresponded to points of punctuation in which the

A picture containing timeline

Description automatically generated

threat narrative notably intensified, indicating that Chinese actions helped to significantly drive it.

Fueled by its rapid economic growth, strategic geographic location, and large population, China was recognized early as being well-placed to have a greater impact on the regional and world stages. The primary theme of the initial narrative was about China’s potential power. However, whether it would constitute a threat to U.S. interests and the region was placed primarily on the Chinese government and how it would employ its newfound power – that is, whether it would actively seek to undermine American regional dominance. In 1995, for example, China was noted as the chief exception to the global trend of declining military budgets, but special emphasis was placed on how it “might use its military forces” (S.Hrg.104-15 1995, 33). Specifically, “the rapid growth in China’s material strength has raised the importance of China in the Asian security equation” and the “peace, stability, and economic growth in the AsiaPacific region” was, in large part, dependent upon whether China sought friendly relations with its neighbors (S.Hrg.104-15 1995, 43). At this point, the notion that China could threaten American global position and the world order was not discussed. Instead, the possibility only was that China could use its rising power to challenge the regional order.

A significant intensification of the China threat narrative accompanied the Third Taiwan Strait Crisis of 1995–1996, in which China conducted a series of missile tests in waters surrounding Taiwan and mobilized its military across the strait. As seen in Figure 3, which illustrates China’s role in triggering regional instability within East-Asia as a percentage of annual references, there was a significant increase in this issue during the 1996 and 1997 hearings. This crisis was generated in response to a visit to the U.S. by Taiwan’s president, which the Chinese government considered an unacceptable symbolic act of American support for the more independence-leaning leader, and in the context of Taiwan’s 1996 election, in which he was standing for reelection. The U.S. eventually responded by sending two carrier battle groups to the area. The consequences of this crisis were still unfolding when the 1996 threat hearing was held, and it was the first time in which China was described as actually “threatening” and “serious questions” were raised “about Beijing’s intentions” and regional goals (S.Hrg.104- 510 1996, 5). Chinese “saber-rattling” was placed in the context of its preparations for “local and limited conflicts,” which ran counter to China’s claims that it sought constructive relations with its neighbors (S.Hrg.104-510 1996, 47). The reasons for its actions were not provided in the testimony nor were its concerns over Taiwan given any legitimacy. This narrative direction continued in 1997, with greater attention paid to China’s potential, and negative, impact in Asia-Pacific should it choose to become “more assertive and aggressive” (S.Hrg.105-201 1997, 16). The implication of this testimony was that the success of America’s policy of engagement with China was ultimately dependent upon Chinese intentions and not American policy.

Given China’s policies vis-à-vis Taiwan, it is perhaps not surprising that its great power ambitions and revisionist goals were first introduced in 1996 and became recurring themes in American depictions of China over the next several years. By 2001, Chinese ambitions were described as having “come sharply into focus” and “one of the toughest challenges we face” (S.Hrg.107-2 2001, 10). As seen in Figure 3, over 11% of these reports, on average, referenced China’s great power

Chart

Description automatically generated with medium confidence

ambitions in the decade following 1996. Significantly, this impulse stemmed from internal sources: a nationalist impulse to “[redress] what it often proclaims as a hundred years of humiliation at the hands of Western powers” (S.Hrg.106-580 2000, 18);“a centuries-old quest for national wealth and power” (S.Hrg.107-2 2001, 28); and, domestic politics amongst Communist Party elites who feel “obliged to avoid any hint of being soft on the United States” (S.Hrg.107-597 2002, 134).11 This desire ultimately manifested itself in China’s goal to establish itself as the dominant power in East Asia (S.Hrg.107-2 2001, 28). U.S. officials framed China’s economic growth, military spending, and desire for a sphere of influence as connected to, and in many ways a direct consequence of, its great power ambitions, which largely emerged from internal Chinese dynamics.

This narrative was also connected to one which described China as a revisionist power, with a commitment to a “multipolar world” – a phrase which was first used in regard to China in 2000 (S.Hrg.106-580 2000, 7). This goal rejected the U.S.-led unipolar international system and sought to establish a new geopolitical architecture. This assessment of Chinese goals can, in large part, explain why the China threat narrative again spiked in 2001: China was expected to consistently “attempt to limit or forestall American unilateral or US led actions judged adverse to China’s own interests because they seem to strengthen and perpetuate a unipolar world” (S.Hrg.107-2 2001, 28). This new narrative was important because it rearticulated the China threat as directly inimical to America’s global position. While officials recognized that China saw the U.S. as its primary impediment to achieving regional goals, there was no acknowledgment from the U.S. side that its policies were in any way responsible. Furthermore, there was no sense that China had a legitimate concern regarding American unilateralism or its forward military positioning along China’s periphery. Rather, the implication was that Beijing’s perceptions were simply incorrect.

While these themes were repeated during hearings over the first decade of the 2000s, there was a lull in the amount of attention paid to China at this time associated with America’s preoccupation with the Global War on Terrorism. For example, there were only a few score references to China across all reports submitted in 2007, and these were almost entirely focused on recounting China’s conventional and nuclear capabilities. But, after China became far more active in the South China Sea around 2008 and as the U.S. moved further away from 9/11, there was a meaningful intensification in the China threat narrative. The Obama administration’s intention to refocus U.S. foreign policy away from the Middle East and toward the Asia-Pacific region through the so called “pivot” also played a key role in this narrative shift as a means to justify it (Ambrosio et al. 2018).

Thus, the China threat narrative which developed around this time depicted China as a far more active, confident threat, which was willing to assert its great power ambitions regionally and even extra-regionally – the latter reflected its growing engagement with Africa and Latin America (S.Hrg.110-634 2008, 28). Accordingly, China was characterized as dedicated to “assertive . . . behavior” and becoming “a more imposing and potentially difficult international actor” in the future (S.Hrg.112-159 2011, 16). This wider focus was backed by a military which (a)energetically sought to counter America’s military advantages in the region, to the point that it was beginning to emerge as a peer competitor, at least regionally; (b)adopted “an offensive operational [military] doctrine” and “possible preemptive action;” and, (c)was building the capacity to act extraregionally in support of its broader great power interests, such as establishing naval facilities in the Indian Ocean (S.Hrg.110-634 2008, 43). These actions were portrayed as ultimately connected to overturning America’s global position.

This increased threat narrative was evidenced by the 2010 spike in references to China’s great power ambitions, as seen in Figure 3, where nearly a third of all references to China mentioned these designs. This overall characterization was reinforced by an increased focus on Chinese actions in the South China Sea, with references to intentions reaching a high-point in 2012 (see Figure 2). Furthermore, China was depicted as a multifaceted threat dedicated to expanding its geographic profile, with an increased willingness to undertake cyberspace and foreign intelligence operations against the U.S., and prepared for conflicts in which space/counterspace capabilities would prove crucial. Over the next decade, each of these themes continued, becoming significantly more serious as U.S. perceptions of great power threat became central to the American narrative in the latter half of the 2010

#### No empirical support for transition wars --- they misunderstand incentive structures, accommodation theory is true, and conflict is contained --- this card smokes them

Wohlforth 17 William C. Wohlforth, William Curti Wohlforth is the Daniel Webster Professor of Government in the Dartmouth College Department of Government. “Chapter 3: Not Quite the Same as it Ever Was”, in “Will China’s Rise be Peaceful? The Rise of a Great Power in Theory, History, Politics, and the Future.” Oxford University Press. December 27, 2017.

A narrative has taken hold around the world that is directly relevant to this volume: that the material capabilities standing behind the dominant order are in relative decline, and, as a result, contestation – sometimes violent – over basic rules and institutions is on the rise. Legitimacy ultimately rests on power, the argument goes, and so rising powers will seek to undermine the legitimacy of the current order and establish new rules. If the status quo states resist, the result will be instability and hence insecurity. The narrative dominates punditry but also reflects the official policy and concrete, costly behavior of major powers. Putin’s Russia has forcefully toppled one of the foundational pillars of the 1991 settlement: respect for the territorial status quo in Eurasia. China’s neighbors accuse it of raising the specter of a forceful resolution of maritime boundary disputes in contravention of widely agreed regional norms and principles of international law. Both countries continue to increase military expenditures, in Russia’s case shouldering a greater relative burden than the United States (4.2 vs. 3.8 percent of GDP). The BRICS (Brazil, Russia, India, China, and South Africa) grouping and its fellow travelers push back against Western-sponsored expansions of norms regarding human rights and legal armed intervention in sovereign states under the “responsibility to protect” (R2P) rubric. On global economic governance, rising powers seek greater roles in existing institutions or periodically work to create nascent regional alternatives. Not surprisingly, attempts to measure the effectiveness of institutionalized cooperation on a large range of key global issues find a depressing downward trend. Where is this headed? Many analysts portray current contestation as the leading edge of a full-blown conflict over the US-led global order. Ably represented in this collection by Christopher Layne’s chapter, their arguments often feature the use of terminology that suggests system-altering changes are afoot, for example, the claim that the unipolar era is over or a new multi- or bipolar world I nigh. Another indicator of this view is the popularity of the 1914 analogy: that China’s rise and its dissatisfaction with the status quo are like Wilhelmine Germany’s, raising similar risks of escalation and major military conflict. Against this view is the position championed in this volume most notably by John Ikenberry and Rosemary Foot, arguing that the current order is far more robust and resilient than the pessimists content. In this view, while contestation grabs the headlines, the main underlying trend is adaptation and accommodation. In this chapter, I address this question using the classical Gilpinian framework as well as more recent rise-and-decline scholarship. I argue that the balance of theory and evidence points to a more nuanced position: we are in for increased competitiveness and contestation; a harder-to-manage world has indeed arrived, but the essential structural imperatives that have operated for the last two decades are likely to remain in place. The pessimists overstate the scale and significance of change; the optimists understate the levels of dissatisfaction and the challenges of accommodation. I consider the implications of three key ways in which the current power shift differs from the canonical historical cases that inform much scholarship and commentary. In each case, there is a big implication and a qualifier. The big implication is that each change favors the status quo states and makes revisionism harder. The qualifier is that each also allows lower-level competition by creating incentives for challengers to challenge and status quo states to stick to current commitments. The three changes, considered in the sections that follow. are these: 1. The near certainty that all-out systemic war is off the table as a mechanism for hegemonic transition 2. The fact that the rising challenger to the system’s dominant state is credibly approaching peer status on only one dimension of state capability, gross economic output; and 3. The historically unprecedented degree of institutionalization in world politics coupled with the uniquely central role institutions play in the dominant power’s grand strategy. A “hegemonic war is characterized by the unlimited means employed and by the general scope of the warfare,” Robert Gilpin wrote over thirty years ago. “Because all parties are drawn into the war and the stakes involved are high, few limitations, if any, are observed with respect to the means employed.” Such a war is exceedingly unlikely to emerge among states armed with secure second-strike nuclear forces, whose core security, future power, and economic prosperity do not hinge on the physical control of others’ territory. We need to know what function these wars served in the past to assess the full implications of their expected absence in the future. Needless to say, there is no scholarly consensus on this question. Here I shall focus specifically on the main theories that assign this type of war an important role in explaining international politics, setting aside for now the many approaches that deny any special functional implications to especially large or costly wars. Two functional arguments are most prominent in the literature. For Gilpin, as for many theorists in the power-cycle tradition, the core function of hegemonic war is to resolve the contradiction between the underlying distribution of capabilities in the system and the hierarchy of prestige. His theory relies on a major lag between the diffusion of system capabilities away from the hegemon, on the one hand, and states’ ability to revise the international order accordingly, on the other hand. As capabilities shift to rising states, their dissatisfaction increases, as does their putative bargaining power, but the dominant states face incentives to hold fast defending the existing order. The gap between the system’s material “base” and its governance superstructure is resolved by a major war, which clarifies the distribution of capabilities and prestige, setting the stage for efficient bargaining over a new order. John Ikenberry stresses a second function: “Major or great-power war is a uniquely powerful agent of change in world politics because it tends to destroy and discredit old institutions and force the emergence of a new leading or hegemonic state.” The first part of Ikenberry’s argument seems intuitive, but it does not clear exactly how war “forces the emergene” of a new hegemon. Randall Schweller has most recently and fulsomely developed the core arguments for why hegemonic war alone can perform these functions. Other destructive events one can imagine, such as a global economic crash, pandemic, or environmental catastrophe, may wreak widespread destruction, but they are not driven by political logics and so cannot perform certain political functions. As Schweller argues, “It is precisely the political ends of hegemonic wars that distinguish them and the crucial international-political functions they perform – most important, crowning a new hegemonic king and wiping the global institutional slate clean – from mere cataclysmic global events.” On his view, only hegemonic war can force the emergence of a new hegemon, clarify power relations, and wipe the interstate institutional structure clean, leaving a tabula rasa for the newly anointed hegemon to write new rules. “The distasteful truth of history,” Schweller writes, “is that violent conflict not only cures the ill effects of political inertia and economic stagnation but is often the key that unlocks all the doors to radical and progressive historical change.” But this distasteful truth rests on an assumption: that war is indeed governed by political logic, while other kinds of global events (or states’ reactions to them) are not. And Clausewitz’s famous thesis that war is a continuation of politics has always been in tension with the antithesis also highlighted by the Prussian theorist: war’s inherent tendency to escape control. The argument that hegemonic wars are at root powerful political processes has yet to be subjected to focused empirical studies. For his part, Gilpin ignored the actual processes wrought by war, focusing almost exclusively on causes. Ikenberry’s narrative studies of postwar order building implicitly refer back to his arguments about war’s effects, but they are not structured around an investigation of these processes. And Schweller’s claim that hegemonic wars are necessary to prevent the degenerative “entrophy” of international politics rests entirely on contemporary evidence of disorder, ungovernability, dissolution, and dissipation rather than concrete evidence that hegemonic wars prevented these processes from occurring in the past.

#### China’s drive for regional hegemony is peaceful and not zero-sum with the U.S.

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

First, China is pursuing hegemony in East Asia, but not an exclusive hostile hegemony. It is not trying to extrude the United States from the region or deny American access there. The Chinese have long recognized the utility—and the benefits to China itself—of U.S. engagement with the region, and they have indicated receptivity to peaceful coexistence and overlapping spheres of influence with the United States there. Moreover, China is not trying to impose its political or economic system on its neighbors, and it does not seek to obstruct commercial freedom of navigation in the region (because no country is more dependent on freedom of the seas than China itself). In short, Beijing wants to extend its power and influence within East Asia, but not as part of a “winner-take-all” contest.

China does have unsettled and vexing sovereignty claims over Taiwan, most of the islands and other features in the East and South China Seas, and their adjacent waters. Although Beijing has demonstrated a willingness to use force in defense or pursuit of these claims, it is not looking for excuses to do so. Whether these disputes can be managed or resolved in a way that is mutually acceptable to the relevant parties and consistent with U.S. interests in the region is an open, long-term question. But that possibility should not be ruled out on the basis of—or made more difficult by—false assumptions of irreconcilable interests. On the contrary, it should be pursued on the basis of a recognition that all the parties want to avoid conflict—and that the sovereignty disputes in the region ultimately are not military problems requiring military solutions. And since Washington has never been opposed in principle to reunification between China and Taiwan as long as it is peaceful, and similarly takes no position on the ultimate sovereignty of the other disputed features, their long-term disposition need not be the litmus test of either U.S. or Chinese hegemony in the region.

Of course, China would prefer not to have forward-deployed U.S. military forces in the Western Pacific that could be used against it, but Beijing has long tolerated and arguably could indefinitely tolerate an American military presence in the region—unless that presence is clearly and exclusively aimed at coercing or containing China. It is also true that Beijing disagrees with American principles of military freedom of navigation in the region; and this constitutes a significant challenge in waters where China claims territorial jurisdiction in violation of the UN Commission on the Law of the Sea. But this should not be conflated with a Chinese desire or intention to exclusively “control” all the waters within the first island chain in the Western Pacific. The Chinese almost certainly recognize that exclusive control or “domination” of the neighborhood is not achievable at any reasonable cost, and that pursuing it would be counterproductive by inviting pushback and challenges that would negate the objective.

So what would Chinese “hegemony” in East Asia mean or look like? Beijing probably thinks in terms of something much like American primacy in the Western Hemisphere: a model in which China is generally recognized and acknowledged as the de facto central or primary power in the region, but has little need or incentive for militarily adventurism because the mutual benefits of economic interdependence prevail and the neighbors have no reason—and inherent disincentives—to challenge China’s vital interests or security. And as a parallel to China’s economic and diplomatic engagement in Latin America, Beijing would neither exclude nor be hostile to continued U.S. engagement in East Asia.

A standard counterargument to this relatively benign scenario is that Beijing would not be content with it for long because China’s strategic ambitions will expand as its capabilities grow. This is a valid hypothesis, but it usually overlooks the greater possibility that China’s external ambitions will expand not because its inherent capabilities have grown, but because Beijing sees the need to be more assertive in response to external challenges to Chinese interests or security. Indeed, much of China’s “assertiveness” within East Asia over the past decade—when Beijing probably would prefer to focus on domestic priorities—has been a reaction to such perceived challenges. Accordingly, Beijing’s willingness to settle for a narrowly-defined, peaceable version of regional preeminence will depend heavily on whether it perceives other countries—especially the United States—as trying to deny China this option and instead obstruct Chinese interests or security in the region.

#### China isn’t revisionist.

McKinney 19, \*Jared Morgan; PhD candidate at the S. Rajaratnam School of International Studies, Nanyang Technological University (Singapore); \*\*Nicholas Butts; Center for Strategic and International Studies Pacific Forum Young Leader. He holds an LL.M. from Peking University, an MSc from The London School of Economics and an MPA from Harvard University where he was also a Crown Prince Frederik Scholar and a Cheng Fellow. (Winter 2019, “Bringing Balance to the Strategic Discourse on China’s Rise”, *Journal of Indo-Pacific Affairs*, pg. 75-76, https://www.airuniversity.af.edu/Portals/10/JIPA/journals/Volume-02\_Issue-4/McKinney.pdf)

In the abstract, such claims are alarming—in context, and in balance, rather humdrum. In fact, the evidence of any Chinese intention to destroy, or even merely undermine and exploit, the current order is slight. China is certainly using its growing military power to defend its claims in the SCS and even—on occasion— to coerce its neighbors. It uses protectionist economic policies to boost the prospects of Chinese companies and reduce competition. It employs economic statecraft to serve its interests abroad. And it certainly is opposed to America’s policy of global democracy promotion. However, none of these positions fundamentally challenge the existing order, none of them radically depart from America’s own actions when it was a rising power in the nineteenth century, and none of them obviously surpass America’s own contemporary record of order subversion.

When the United States was a rising power, it took half of Mexico and considered taking the rest, it colonized the Philippines and Hawaii, and it unilaterally seized the maritime choke points of the Caribbean (Puerto Rico and Cuba).21 The United States used tariffs—which by 1857 averaged 20 percent22 and by the end of the nineteenth century were “the highest import duties in the industrial world”23—to protect its industries. It stole intellectual property,24 and it ideologically challenged the governments of the “Old World.” Today, despite no longer being a rising power, the United States has launched two disastrous invasions, tortured prisoners, and dispatches drone strikes at a whim with little international legal authority.25 The point is not that two wrongs make a right; it is that international order is much more resilient than critics seem to realize,26 and it is utopian to expect any rising Great Power to act in a way that uniformly satisfies one’s moral scruples, evolving, in Friedberg’s words, “into a mellow, satisfied, ‘responsible’ status quo power.”27

Friedberg or Harris might object that America’s rise took place in the context of a different order. This is perfectly true, but the more important point is that the long nineteenth century (1815–1914)—the era of America’s rise—was the first iteration of the New Peace.28 The implication is that relative peace can and has coexisted with limited wars, property and territorial thefts, acts of coercion, and aggressive assertions of status. This does not mean any of these are desirable— they are not—but it shows that they need not be fatal to the system. Insofar as there is a lesson from that first period of relative peace, it is that Great Power confrontation is the one thing that is fatal. Accepting this does not mean capitulating in every instance, as implied by some,29 but it does mean rediscovering the rules of Great Power competition30 alongside the art of strategy.31

Focusing only on areas that China’s rise violates the scruples of the established powers, moreover, downplays the extent to which China, has, in fact, conformed to the existing order. As a RAND Corporation report published in 2018 concludes, China has been a supporter—albeit a conditional one—of the international order: “Since China undertook a policy of international engagement in the 1980s … the level and quality of its participation in the order rivals that of most other states.”32 The way in which Xi Jinping, following his 2017 Davos speech in defense of globalization, has been heralded as the most prominent champion of international order and defender of globalization underscores the fact that there are different elements of this order, and that China supports many, if not most, of them. Even in places where China is supposedly “altering” the current order, Beijing tends to simultaneously affirm that order. China’s Asian Infrastructure Investment Bank, for instance, actually mirrors existing structures, and China has intentionally copied elements and “best practices” of the World Bank and Asian Development Bank. China is playing the same game, even if it is seeking a bigger role.