## 1

#### Interpretation: debaters must not defend a specific actor that bans appropriation of outer space by private entities

#### Violation: they defend China

#### Negate for limits – infinite unpredictable actors like China, SpaceX, Boeing, Ukraine, etc decks negative engagement since they spike out of generics and explodes prep burdens. Encourages process/word PICs since we don’t have specific prep.

#### No rvis – they’ll just bait theory and you don’t win for being topical

#### Competing interps – can’t be reasonably topical

## 2

#### China’s economy is experiencing structural collapse.

Danxu 21 – Yang, 10/28/21, Beijing Correspondent [Think China, “Is China’s economy collapsing?,” <https://www.thinkchina.sg/chinas-economy-collapsing>] Justin

Following the release of China’s latest economic figures, the theory that “China’s economy is collapsing” has resurfaced.

A Business Insider article on 24 October described China's economy — the second largest in the world — as “teetering on the brink of disaster”, adding that if China goes down, the whole world will collapse with it.

And this week, New York Times columnist and economist Paul Krugman wrote: “Warnings about the Chinese economy aren’t new — but until now the worriers, myself included, have been consistently wrong. Back in 2013, I suggested that China’s growth model was becoming unsustainable, and that its economy might be about to hit a Great Wall; obviously that didn’t happen.”

Eight years on, Krugman feels that “the more closely you look at how China has been able to keep its economy going, the more problematic it looks. Basically, China has masked underlying imbalances by creating an immense housing bubble. And it’s hard to see how this ends well.”

18 months after the outbreak, the momentum of China’s economic recovery is slowing.

Slowing growth a reality

Indeed, there have been worrying signs in China’s economy recently. Last week’s official figures show that in the third quarter of this year, China’s economy grew just 4.9% year-on-year, the slowest growth in a year. But while 4.9% growth is still impressive compared to other countries, before the pandemic it would have been hard to imagine China’s economic growth falling below 5%. This also sends a strong message that 18 months after the outbreak, the momentum of China’s economic recovery is slowing.

Before the third-quarter figures were released, there were already signs of China’s economic slowdown. In September, China went through a rare energy crisis, with sudden power rationing in northeast China, bringing the focus on how daily life was affected. This was already preceded by a sustained energy shortage among manufacturing facilities, where many factories had to stop operations due to energy restrictions.

Another sign is the rapid cooling of the property market. The Chinese authorities have always tried to clamp down on property speculation and limit excess loans when it comes to property companies. These harsh measures are working — investments, sales, and new constructions are all on a downward trend.

Last month, it was big news that Chinese property company Evergrande was in debt to the tune of nearly 2 trillion RMB (S$421.8 billion). Investors around the world were worried that the Evergrande crisis might spread and a China-style Lehman Brothers crisis would come crashing in. While the Evergrande debt crisis is under control, there is a lot of attention on whether the property-reliant Chinese economy will be shaken by property cooling measures.

The unpredictable pandemic and China’s firm zero-Covid policy also continues to affect the economy. In July, the pandemic situation in Nanjing led to a strict localised lockdown, dealing a big hit to the tourism, food and beverage, and other industries. Quoting statistics from Flight Master, The Economist reported that in August, airlines were operating at less than half their capacity, and at two-thirds their capacity in September.

In October when the tourism industry gradually regained its footing, another wave of local infections broke out again in the middle of the month. Inter-provincial tour groups were later suspended in Beijing, Inner Mongolia, Guizhou, Gansu, Ningxia, Shandong and so on. Recently, this saying has gone viral online: “This year, the tourism, exhibition and hotel industries are just like a donkey pulling the mill. When the donkey is healthy, the mill is broken. When the mill has been repaired, the donkey is sick. When both the donkey and mill are ready, the reins are broken. When the mill and reins have both been repaired, the donkey has gone crazy.”

Just when the state of China’s economy is being questioned and the Chinese are getting more and more anxious, Chinese state media Xinhua News Agency published a lengthy commentary titled “Key insights into China's current economic situation” on 26 October. Through interviews with “a number of authoritative departments and individuals”, the commentary answered questions on everyone’s minds such as the growth rate, power supply and the property market, in an attempt to reassure the outside world.

It is the Chinese Communist Party’s (CCP) tradition to have “authoritative individuals” respond to major social concerns. Some observers think that these commentators are most likely higher-ups directly in charge of China’s economy, and that their views could even represent the economic opinions of CCP leaders. Releasing this commentary at this point in time shows that confidence in China’s economy has been shaken and this situation has drawn the attention of the higher-ups.

#### Robust private sector key to Economic Rejuvenation.

Goswami 19 Namrata Goswami 2019 "What China Wants in Outer Space" <https://www.thecairoreview.com/wp-content/uploads/2019/05/cr33-global-forum.pdf> (Dr. Namrata Goswami is an independent scholar on space policy, great power politics, and ethnic conflicts. She was subject matter expert in international affairs with the Futures Laboratory, Alabama, U.S., and guest lecturer, India Today Class, Emory University. After earning her Ph.D. in international relations from Jawaharlal Nehru University, New Delhi, she worked as research fellow at the Institute for Defence Studies and Analyses, New Delhi. She has been a visiting fellow at Peace Research Institute, Oslo, Norway; La Trobe University, Melbourne, Australia; and University of Heidelberg, Germany.)//Elmer

Beijing has made it clear that its ambitions for China’s space program are an integral part of its long-term vision for national rejuvenation. In his 2017 address to the Chinese Communist Party’s nineteenth National Congress, President Xi Jinping said that the Chinese space program will play a critical role in elevating the country to a “fully developed, rich, and powerful nation” by 2049—the year the People’s Republic of China celebrates its one-hundredth anniversary. For China, investing in outer space goes beyond simply achieving prestige and reputation—as opposed to the “flags and footprints”-based moon race between the United States and the Soviet Union during the Cold War. Instead, China aims to establish a permanent space presence, which would offer long-term economic benefits. The global space economy today is worth $350 billion, but is predicted to grow to $2.7 trillion by 2040. The economic returns from future mining of space-based resources like titanium, platinum, water-ice, thorium, and iron-ore far exceed the trillion-dollar mark. Consequently, the Chinese are working to establish a base on the moon with the industrial capacity to build spacecrafts using lunar resources. This would drastically reduce the cost of interplanetary travel. A lunar base would serve the distinctive purpose of providing a testing ground for human space settlement, and building capacity for China’s long-term space ambitions. Beijing’s Lunar Dreams Following the landing of Chang’e 4 (China’s fourth lunar exploration mission) on the far side of the moon on January 3, the China National Space Administration (CNSA) announced follow-on missions to augment the state’s space capacity. By this year’s end, China will launch Chang’e 5 to bring lunar samples back to Earth, followed by Chang’e 6 (2024) to bring samples specifically from the moon’s south pole. Chang’e 7 (2030) will survey the south pole’s composition and Chang’e 8 (2035) will test key technologies like 3D printing to lay the groundwork for the construction of a research station. The moon not only strengthens China’s space-faring capacities but also has resources like iron-ore and water that can be utilized for space-based manufacturing. Meanwhile, a lunar base offers some short-term strategic dominance in cislunar space (the area between the Earth and the moon). Another of China’s major space ambitions is its investment in SpaceBased Solar Power (SBSP) to build a space solar station thirty-six thousand kilometers above Earth. Some Chinese leaders stress that dwindling fossil fuel resources on Earth will make solar energy the most important future energy source. China started construction on the world’s first SBSP experimental plant in Chongqing earlier this year. If successful, the technology would allow China to fully power its lunar base and augment space mining operations. Space mining involves developing technologies to harvest resources from asteroids and the moon—a highly lucrative prospect. For instance, a single asteroid called 2011 UW158, which passed by Earth in 2015, was estimated to contain 5 trillion dollars’ worth of platinum. While still roughly a decade off, space mining is fast becoming a reality. Countries like the United States and Luxembourg have already passed legislation enabling private companies to begin exploration and operations.

#### That cascades globally.

Rogoff 18 Kennetth Rogoff 11-7-2018 "The Global Impact of a Chinese Recession" <https://www.project-syndicate.org/commentary/global-impact-of-chinese-recession-by-kenneth-rogoff-2018-11?barrier=accesspaylog> (Professor of Economics and Public Policy at Harvard University and recipient of the 2011 Deutsche Bank Prize in Financial Economics, was the chief economist of the International Monetary Fund from 2001 to 2003.)//Elmer

Most economic forecasts suggest that a recession in China will hurt everyone, but that the pain would be more regionally confined than would be the case for a deep recession in the United States. Unfortunately, that may be wishful thinking. CAMBRIDGE – When China finally has its inevitable growth recession – which will almost surely be amplified by a financial crisis, given the economy’s massive leverage – how will the rest of world be affected? With US President Donald Trump’s trade war hitting China just as growth was already slowing, this is no idle question. Typical estimates, for example those embodied in the International Monetary Fund’s assessments of country risk, suggest that an economic slowdown in China will hurt everyone. But the acute pain, according to the IMF, will be more regionally concentrated and confined than would be the case for a deep recession in the United States. Unfortunately, this might be wishful thinking. First, the effect on international capital markets could be vastly greater than Chinese capital market linkages would suggest. However jittery global investors may be about prospects for profit growth, a hit to Chinese growth would make things a lot worse. Although it is true that the US is still by far the biggest importer of final consumption goods (a large share of Chinese manufacturing imports are intermediate goods that end up being embodied in exports to the US and Europe), foreign firms nonetheless still enjoy huge profits on sales in China. Investors today are also concerned about rising interest rates, which not only put a damper on consumption and investment, but also reduce the market value of companies (particularly tech firms) whose valuations depend heavily on profit growth far in the future. A Chinese recession could again make the situation worse. I appreciate the usual Keynesian thinking that if any economy anywhere slows, this lowers world aggregate demand, and therefore puts downward pressure on global interest rates. But modern thinking is more nuanced. High Asian saving rates over the past two decades have been a significant factor in the low overall level of real (inflation-adjusted) interest rates in both the United States and Europe, thanks to the fact that underdeveloped Asian capital markets simply cannot constructively absorb the surplus savings. Former US Federal Reserve chair Ben Bernanke famously characterized this much-studied phenomenon as a key component of the “global savings glut.” Thus, instead of leading to lower global real interest rates, a Chinese slowdown that spreads across Asia could paradoxically lead to higher interest rates elsewhere – especially if a second Asian financial crisis leads to a sharp draw-down of central bank reserves. Thus, for global capital markets, a Chinese recession could easily prove to be a double whammy. As bad as a slowdown in exports to China would be for many countries, a significant rise in global interest rates would be much worse. Eurozone leaders, particularly German Chancellor Angela Merkel, get less credit than they deserve for holding together the politically and economically fragile single currency against steep economic and political odds. But their task would have been well-nigh impossible but for the ultra-low global interest rates that have allowed politically paralyzed eurozone officials to skirt needed debt write-downs and restructurings in the periphery. When the advanced countries had their financial crisis a decade ago, emerging markets recovered relatively quickly, thanks to low debt levels and strong commodity prices. Today, however, debt levels have risen significantly, and a sharp rise in global real interest rates would almost certainly extend today’s brewing crises beyond the handful of countries (including Argentina and Turkey) that have already been hit. Nor is the US immune. For the moment, the US can finance its trillion-dollar deficits at relatively low cost. But the relatively short-term duration of its borrowing – under four years if one integrates the Treasury and Federal Reserve balance sheets – means that a rise in interest rates would soon cause debt service to crowd out needed expenditures in other areas. At the same time, Trump’s trade war also threatens to undermine the US economy’s dynamism. Its somewhat arbitrary and politically driven nature makes it at least as harmful to US growth as the regulations Trump has so proudly eliminated. Those who assumed that Trump’s stance on trade was mostly campaign bluster should be worried. The good news is that trade negotiations often seem intractable until the eleventh hour. The US and China could reach an agreement before Trump’s punitive tariffs go into effect on January 1. Such an agreement, one hopes, would reflect a maturing of China’s attitude toward intellectual property rights – akin to what occurred in the US during the late nineteenth century. (In America’s high growth years, US entrepreneurs often thought little of pilfering patented inventions from the United Kingdom.) A recession in China, amplified by a financial crisis, would constitute the third leg of the debt supercycle that began in the US in 2008 and moved to Europe in 2010. Up to this point, the Chinese authorities have done a remarkable job in postponing the inevitable slowdown. Unfortunately, when the downturn arrives, the world is likely to discover that China’s economy matters even more than most people thought.

#### Extinction.

Maavak 21 – Mathew Maavak, PhD in Risk Foresight from the Universiti Teknologi Malaysia, External Researcher (PLATBIDAFO) at the Kazimieras Simonavicius University, Expert and Regular Commentator on Risk-Related Geostrategic Issues at the Russian International Affairs Council, “Horizon 2030: Will Emerging Risks Unravel Our Global Systems?”, Salus Journal – The Australian Journal for Law Enforcement, Security and Intelligence Professionals, Volume 9, Number 1, p. 2-8

Various scholars and institutions regard global social instability as the greatest threat facing this decade. The catalyst has been postulated to be a Second Great Depression which, in turn, will have profound implications for global security and national integrity. This paper, written from a broad systems perspective, illustrates how emerging risks are getting more complex and intertwined; blurring boundaries between the economic, environmental, geopolitical, societal and technological taxonomy used by the World Economic Forum for its annual global risk forecasts. Tight couplings in our global systems have also enabled risks accrued in one area to snowball into a full-blown crisis elsewhere. The COVID-19 pandemic and its socioeconomic fallouts exemplify this systemic chain-reaction. Onceinexorable forces of globalization are rupturing as the current global system can no longer be sustained due to poor governance and runaway wealth fractionation. The coronavirus pandemic is also enabling Big Tech to expropriate the levers of governments and mass communications worldwide. This paper concludes by highlighting how this development poses a dilemma for security professionals. Key Words: Global Systems, Emergence, VUCA, COVID-9, Social Instability, Big Tech, Great Reset INTRODUCTION The new decade is witnessing rising volatility across global systems. Pick any random “system” today and chart out its trajectory: Are our education systems becoming more robust and affordable? What about food security? Are our healthcare systems improving? Are our pension systems sound? Wherever one looks, there are dark clouds gathering on a global horizon marked by volatility, uncertainty, complexity and ambiguity (VUCA). But what exactly is a global system? Our planet itself is an autonomous and selfsustaining mega-system, marked by periodic cycles and elemental vagaries. Human activities within however are not system isolates as our banking, utility, farming, healthcare and retail sectors etc. are increasingly entwined. Risks accrued in one system may cascade into an unforeseen crisis within and/or without (Choo, Smith & McCusker, 2007). Scholars call this phenomenon “emergence”; one where the behaviour of intersecting systems is determined by complex and largely invisible interactions at the substratum (Goldstein, 1999; Holland, 1998).

The ongoing COVID-19 pandemic is a case in point. While experts remain divided over the source and morphology of the virus, the contagion has ramified into a global health crisis and supply chain nightmare. It is also tilting the geopolitical balance. China is the largest exporter of intermediate products, and had generated nearly 20% of global imports in 2015 alone (Cousin, 2020). The pharmaceutical sector is particularly vulnerable. Nearly “85% of medicines in the U.S. strategic national stockpile” sources components from China (Owens, 2020). An initial run on respiratory masks has now been eclipsed by rowdy queues at supermarkets and the bankruptcy of small businesses. The entire global population – save for major pockets such as Sweden, Belarus, Taiwan and Japan – have been subjected to cyclical lockdowns and quarantines. Never before in history have humans faced such a systemic, borderless calamity. COVID-19 represents a classic emergent crisis that necessitates real-time response and adaptivity in a real-time world, particularly since the global Just-in-Time (JIT) production and delivery system serves as both an enabler and vector for transboundary risks. From a systems thinking perspective, emerging risk management should therefore address a whole spectrum of activity across the economic, environmental, geopolitical, societal and technological (EEGST) taxonomy. Every emerging threat can be slotted into this taxonomy – a reason why it is used by the World Economic Forum (WEF) for its annual global risk exercises (Maavak, 2019a). As traditional forces of globalization unravel, security professionals should take cognizance of emerging threats through a systems thinking approach. METHODOLOGY An EEGST sectional breakdown was adopted to illustrate a sampling of extreme risks facing the world for the 2020-2030 decade. The transcendental quality of emerging risks, as outlined on Figure 1, below, was primarily informed by the following pillars of systems thinking (Rickards, 2020): • Diminishing diversity (or increasing homogeneity) of actors in the global system (Boli & Thomas, 1997; Meyer, 2000; Young et al, 2006); • Interconnections in the global system (Homer-Dixon et al, 2015; Lee & Preston, 2012); • Interactions of actors, events and components in the global system (Buldyrev et al, 2010; Bashan et al, 2013; Homer-Dixon et al, 2015); and • Adaptive qualities in particular systems (Bodin & Norberg, 2005; Scheffer et al, 2012) Since scholastic material on this topic remains somewhat inchoate, this paper buttresses many of its contentions through secondary (i.e. news/institutional) sources. ECONOMY According to Professor Stanislaw Drozdz (2018) of the Polish Academy of Sciences, “a global financial crash of a previously unprecedented scale is highly probable” by the mid- 2020s. This will lead to a trickle-down meltdown, impacting all areas of human activity. The economist John Mauldin (2018) similarly warns that the “2020s might be the worst decade in US history” and may lead to a Second Great Depression. Other forecasts are equally alarming. According to the International Institute of Finance, global debt may have surpassed $255 trillion by 2020 (IIF, 2019). Yet another study revealed that global debts and liabilities amounted to a staggering $2.5 quadrillion (Ausman, 2018). The reader should note that these figures were tabulated before the COVID-19 outbreak. The IMF singles out widening income inequality as the trigger for the next Great Depression (Georgieva, 2020). The wealthiest 1% now own more than twice as much wealth as 6.9 billion people (Coffey et al, 2020) and this chasm is widening with each passing month. COVID-19 had, in fact, boosted global billionaire wealth to an unprecedented $10.2 trillion by July 2020 (UBS-PWC, 2020). Global GDP, worth $88 trillion in 2019, may have contracted by 5.2% in 2020 (World Bank, 2020). As the Greek historian Plutarch warned in the 1st century AD: “An imbalance between rich and poor is the oldest and most fatal ailment of all republics” (Mauldin, 2014). The stability of a society, as Aristotle argued even earlier, depends on a robust middle element or middle class. At the rate the global middle class is facing catastrophic debt and unemployment levels, widespread social disaffection may morph into outright anarchy (Maavak, 2012; DCDC, 2007).

Economic stressors, in transcendent VUCA fashion, may also induce radical geopolitical realignments. Bullions now carry more weight than NATO’s security guarantees in Eastern Europe. After Poland repatriated 100 tons of gold from the Bank of England in 2019, Slovakia, Serbia and Hungary quickly followed suit. According to former Slovak Premier Robert Fico, this erosion in regional trust was based on historical precedents – in particular the 1938 Munich Agreement which ceded Czechoslovakia’s Sudetenland to Nazi Germany. As Fico reiterated (Dudik & Tomek, 2019): “You can hardly trust even the closest allies after the Munich Agreement… I guarantee that if something happens, we won’t see a single gram of this (offshore-held) gold. Let’s do it (repatriation) as quickly as possible.” (Parenthesis added by author). President Aleksandar Vucic of Serbia (a non-NATO nation) justified his central bank’s gold-repatriation program by hinting at economic headwinds ahead: “We see in which direction the crisis in the world is moving” (Dudik & Tomek, 2019). Indeed, with two global Titanics – the United States and China – set on a collision course with a quadrillions-denominated iceberg in the middle, and a viral outbreak on its tip, the seismic ripples will be felt far, wide and for a considerable period. A reality check is nonetheless needed here: Can additional bullions realistically circumvallate the economies of 80 million plus peoples in these Eastern European nations, worth a collective $1.8 trillion by purchasing power parity? Gold however is a potent psychological symbol as it represents national sovereignty and economic reassurance in a potentially hyperinflationary world. The portents are clear: The current global economic system will be weakened by rising nationalism and autarkic demands. Much uncertainty remains ahead. Mauldin (2018) proposes the introduction of Old Testament-style debt jubilees to facilitate gradual national recoveries. The World Economic Forum, on the other hand, has long proposed a “Great Reset” by 2030; a socialist utopia where “you’ll own nothing and you’ll be happy” (WEF, 2016). In the final analysis, COVID-19 is not the root cause of the current global economic turmoil; it is merely an accelerant to a burning house of cards that was left smouldering since the 2008 Great Recession (Maavak, 2020a). We also see how the four main pillars of systems thinking (diversity, interconnectivity, interactivity and “adaptivity”) form the mise en scene in a VUCA decade. ENVIRONMENTAL What happens to the environment when our economies implode? Think of a debt-laden workforce at sensitive nuclear and chemical plants, along with a concomitant surge in industrial accidents?

Economic stressors, workforce demoralization and rampant profiteering – rather than manmade climate change – arguably pose the biggest threats to the environment. In a WEF report, Buehler et al (2017) made the following pre-COVID-19 observation: The ILO estimates that the annual cost to the global economy from accidents and work-related diseases alone is a staggering $3 trillion. Moreover, a recent report suggests the world’s 3.2 billion workers are increasingly unwell, with the vast majority facing significant economic insecurity: 77% work in part-time, temporary, “vulnerable” or unpaid jobs. Shouldn’t this phenomenon be better categorized as a societal or economic risk rather than an environmental one? In line with the systems thinking approach, however, global risks can no longer be boxed into a taxonomical silo. Frazzled workforces may precipitate another Bhopal (1984), Chernobyl (1986), Deepwater Horizon (2010) or Flint water crisis (2014). These disasters were notably not the result of manmade climate change. Neither was the Fukushima nuclear disaster (2011) nor the Indian Ocean tsunami (2004). Indeed, the combustion of a long-overlooked cargo of 2,750 tonnes of ammonium nitrate had nearly levelled the city of Beirut, Lebanon, on Aug 4 2020. The explosion left 204 dead; 7,500 injured; US$15 billion in property damages; and an estimated 300,000 people homeless (Urbina, 2020). The environmental costs have yet to be adequately tabulated. Environmental disasters are more attributable to Black Swan events, systems breakdowns and corporate greed rather than to mundane human activity. Our JIT world aggravates the cascading potential of risks (Korowicz, 2012). Production and delivery delays, caused by the COVID-19 outbreak, will eventually require industrial overcompensation. This will further stress senior executives, workers, machines and a variety of computerized systems. The trickle-down effects will likely include substandard products, contaminated food and a general lowering in health and safety standards (Maavak, 2019a). Unpaid or demoralized sanitation workers may also resort to indiscriminate waste dumping. Many cities across the United States (and elsewhere in the world) are no longer recycling wastes due to prohibitive costs in the global corona-economy (Liacko, 2021). Even in good times, strict protocols on waste disposals were routinely ignored. While Sweden championed the global climate change narrative, its clothing flagship H&M was busy covering up toxic effluences disgorged by vendors along the Citarum River in Java, Indonesia. As a result, countless children among 14 million Indonesians straddling the “world’s most polluted river” began to suffer from dermatitis, intestinal problems, developmental disorders, renal failure, chronic bronchitis and cancer (DW, 2020). It is also in cauldrons like the Citarum River where pathogens may mutate with emergent ramifications. On an equally alarming note, depressed economic conditions have traditionally provided a waste disposal boon for organized crime elements. Throughout 1980s, the Calabriabased ‘Ndrangheta mafia – in collusion with governments in Europe and North America – began to dump radioactive wastes along the coast of Somalia. Reeling from pollution and revenue loss, Somali fisherman eventually resorted to mass piracy (Knaup, 2008). The coast of Somalia is now a maritime hotspot, and exemplifies an entwined form of economic-environmental-geopolitical-societal emergence. In a VUCA world, indiscriminate waste dumping can unexpectedly morph into a Black Hawk Down incident. The laws of unintended consequences are governed by actors, interconnections, interactions and adaptations in a system under study – as outlined in the methodology section. Environmentally-devastating industrial sabotages – whether by disgruntled workers, industrial competitors, ideological maniacs or terrorist groups – cannot be discounted in a VUCA world. Immiserated societies, in stark defiance of climate change diktats, may resort to dirty coal plants and wood stoves for survival. Interlinked ecosystems, particularly water resources, may be hijacked by nationalist sentiments. The environmental fallouts of critical infrastructure (CI) breakdowns loom like a Sword of Damocles over this decade.

GEOPOLITICAL The primary catalyst behind WWII was the Great Depression. Since history often repeats itself, expect familiar bogeymen to reappear in societies roiling with impoverishment and ideological clefts. Anti-Semitism – a societal risk on its own – may reach alarming proportions in the West (Reuters, 2019), possibly forcing Israel to undertake reprisal operations inside allied nations. If that happens, how will affected nations react? Will security resources be reallocated to protect certain minorities (or the Top 1%) while larger segments of society are exposed to restive forces? Balloon effects like these present a classic VUCA problematic. Contemporary geopolitical risks include a possible Iran-Israel war; US-China military confrontation over Taiwan or the South China Sea; North Korean proliferation of nuclear and missile technologies; an India-Pakistan nuclear war; an Iranian closure of the Straits of Hormuz; fundamentalist-driven implosion in the Islamic world; or a nuclear confrontation between NATO and Russia. Fears that the Jan 3 2020 assassination of Iranian Maj. Gen. Qasem Soleimani might lead to WWIII were grossly overblown. From a systems perspective, the killing of Soleimani did not fundamentally change the actor-interconnection-interaction adaptivity equation in the Middle East. Soleimani was simply a cog who got replaced.

## 3

#### CP Text: The United States should work with allies to expand space-based military capabilities and expand arms control to end Chinese ASAT capabilities – spec below.

* We will defend our solvency evidence – that includes banning targeting of satellites, peace talks and negotiations with China, punishment of aggression, elimination of ASAT weapons and deployment, and a prohibition on testing, stockpiling, and development of ASAT technologies.

#### The counterplan solves ASAT escalation.

Sankaran 14 [Fellow at the Belfer Center for Science and International Affairs at Harvard’s Kennedy School of Government and was previously a Stanton Nuclear Security Fellow at the RAND Corporation. Sankaran received his doctorate in international security from the Maryland School of Public Policy, where he wrote his dissertation on space security. "Limits of the Chinese Antisatellite Threat to the United States." <https://www.cissm.umd.edu/sites/default/files/Limits%20of%20the%20Chinese%20Antisatellite%20Threat%20to%20the%20United%20States.pdf>] Recut Justin

Any coherent plan to dissuade and deter China from employing an ASAT attack will have to also include negotiations and arms control agreements. While a comprehensive arms control agreement in space may suffer verification issues,51 even a limited agreement will endow the principals with several benefits. An arms control agreement may not completely prevent the covert development of Chinese capabilities, but it will significantly reduce the confidence of the Chinese military in an ASAT weapon system that an otherwise meticulously designed testing program would give it. An arms control agreement or even the negotiating process over such an agreement will convince any potential adversary, including China, of important thresholds. These processes can provide a valuable forum to develop ground rules for space operations, including during periods of war. For example, US military satellites that provide missile early warning have a tactical utility, but more importantly, they also serve to maintain the stability of nuclear deterrence between the United States and China. Rules should be explored to eliminate any consideration of targeting these satellite systems. While serving as the US deputy assistant secretary of state for space and defense policy in 2012, Frank A. Rose claimed that “there has [sic] been a number of Chinese defense intellectuals arguing that shooting down American nuclear early warning satellites is de-escalatory. We want to have a discussion with them so that they understand that this is not the case.”52 That discussion will not occur unless there is direct contact and an inclination to engage in reaching middle ground. Engaging in negotiations over space security and demonstrating leadership with such measures will help characterize the United States as a responsible actor and render it with the authority to respond with force when an attack is made on its or allied space assets. The latest National Security Space Strategy has indicated that the United States would use force in response to offensive operations against it in a manner consistent with long-standing principles of international law, treaties to which the United States is a party, and the inherent right of self-defense.53 The international community should be convinced of the justice to punish a space aggressor and to support the United States in its use of lethal force to do so. Engaging in discussions to establish ground rules during times of peace will help to provide such support.54

#### It secures hegemony and de-escalates conflict.

Bowman and Thompson 3-31 [(Bradley Bowman, the senior director of the Center on Military and Political Power at the Foundation for Defense of Democracies) (Jared Thompson, a U.S. Air Force major and visiting military analyst at the Foundation for Defense of Democracies.) “Russia and China Seek to Tie America’s Hands in Space” Foreign Policy 3/31/2021. https://foreignpolicy.com/2021/03/31/russia-china-space-war-treaty-demilitarization-satellites/] BC Recut Justin

A well-crafted treaty that clearly defines acceptable and unacceptable actions in space and includes tough and realistic inspection and verification mechanisms could promote security and stability. But the PPWT is decidedly not that kind of treaty. For starters, the proposed treaty does not explicitly prohibit the ground-based anti-satellite weapons that China and Russia have already fielded. Nor does the proposed treaty prevent the deployment of space-based weapons under the cloak of civilian or commercial capabilities. The PPWT also does not prohibit the development, testing, or stockpiling of weapons on Earth that could be quickly put into orbit.

Even if these deficiencies were addressed, the PPWT lacks any verification plan to ensure compliance. Instead, the treaty calls for “transparency and confidence-building measures” implemented on a “voluntary basis.” In other words, Beijing and Moscow want the United States to trust but never verify. But then again, Americans should not be surprised by the PPWT. Moscow habitually seeks to use international arms control treaties to constrain the United States while viewing treaty strictures as optional when they become inconvenient or when the Kremlin sees an opportunity to seize a military advantage. For more than a decade before its demise in 2019, Moscow used the Intermediate-Range Nuclear Forces Treaty to constrain the United States while the Kremlin produced, flight-tested, and fielded a ground-launched intermediate-range cruise missile in direct contravention of the treaty. Beijing, for its part, often exhibits an allergy to serious international arms control treaties. The willingness of the Chinese Communist Party to support the PPWT is, therefore, cause for some additional reflection in Washington.

So instead of falling prey to China and Russia’s PPWT trap, the United States must urgently work with allies to improve the resilience and redundancy of spaced-based military and intelligence capabilities. Washington should also advance nascent efforts to establish rules of the road in space. “There are really no norms of behavior in space,” Gen. John Raymond, the chief of space operations at U.S. Space Force, said this month. “It’s the wild, wild West.” In a notable and positive step, the U.N. General Assembly passed a British-introduced resolution in December that seeks to establish “norms, rules and principles of responsible behaviours” in space, which could reduce the chances for dangerous miscalculation.

#### It's enforceable and China agrees.

Arbatov 19 [Alexey Arbatov is the head of the Center for International Security at the Primakov National Research Institute of World Economy and International Relations. Arbatov is a former scholar in residence and the chair of the Carnegie Moscow Center’s Nonproliferation Program. Formerly, he was a member of the State Duma, vice chairman of the Russian United Democratic Party (Yabloko), and deputy chairman of the Duma Defense Committee. "Arms control in outer space: The Russian angle, and a possible way forward." <https://www.tandfonline.com/doi/abs/10.1080/00963402.2019.1628475?journalCode=rbul20>] Justin

Verification of such an agreement could be based on national technical means, preferably in conjunction with cooperative measures and well-defined transparency. For example, the existing format for notification of all missile launches should be expanded to all experiments that have a destructive effect on space objects. Elimination of obsolescent satellites that threaten to fall to Earth should be conducted under the supervision of the other party or parties, with sufficient information presented so as to remove suspicion of tacit ASAT testing. Rendezvous and proximity operations – in which one satellite is maneuvered close to another – may gradually enhance anti-satellite capabilities and eventually come to threaten early-warning satellites. This threat may be addressed at a later stage of talks.

A partial solution might consist of an agreement that would strictly regulate the permitted speed and distance of such approaches toward all space objects and require pre-notification of all such operations. The first treaty could initially involve the United States, Russia, and, one might hope, China and India, but also provide for the possibility of membership for any other country in the future. The treaty could be limited to a 10- year period, with the option of extending. This period would be less than the time required for the deployment of any technically feasible space-based ballistic missile defense system that would be a primary concern and target of Russian (and Chinese) land-based ASAT programs.

That is why banning anti-satellite tests might be acceptable to them. Besides, as with any other such agreement, this first anti-satellite weapon treaty should contain the right of withdrawal, should an extraordinary event jeopardize the “supreme interests” of either side. Russia (and China, if it joined such an agreement) could make a unilateral statement referring to the creation of space ballistic missile defense as a possible cause for invoking the withdrawal right.49

## 4

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

#### ---ban private actor appropriation except for Asteroid Mining.

#### ---de-militarize its space industry.

#### ---eliminate ASAT weapons and nuclear arsenals

#### ---end cooperation with Russia.

#### China’s key for asteroid mining and solves warming.

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.

#### Extinction.

Dr. Peter Kareiva 18 – 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, et al., September 2018, “Existential Risk Due To Ecosystem Collapse: Nature Strikes Back”, Futures, Volume 102, p. 39-50

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 challenges 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.

## 5

#### Xi is tightening control over the PLA but completing goals are critical.

Krishnan 21 – Ananth, 11/18/21, [‘Xi tightened control over the PLA’, TheHindu, <https://www.thehindu.com/news/international/xi-tightened-control-over-the-pla/article37549460.ece>] Justin

The new resolution on history passed last week by China’s ruling Communist Party has said that President Xi Jinping had tightened control over the military to address the party’s “obviously lacking” leadership of the armed forces under his predecessors.

The full text of the resolution, released on Tuesday evening, listed some of the actions taken by the People’s Liberation Army (PLA) under Mr. Xi, who is also the chairman of the Central Military Commission. These included what the document described as “major operations related to border defence”.

No specifics It did not specify what those major operations were. China has unresolved land borders with India and Bhutan. In April 2020, the PLA mobilised two divisions and carried out multiple transgressions across the Line of Actual Control (LAC) in Eastern Ladakh, sparking the worst crisis along the border in many years. Talks to resolve the tensions are still on-going. “The armed forces have remained committed to carrying out military struggles in a flexible manner to counter military provocations by external forces, and they have created a strong deterrent against separatist activities seeking ‘Taiwan independence,’” the resolution said. “They have conducted major operations related to border defence, protecting China’s maritime rights, countering terrorism and maintaining stability, disaster rescue and relief, fighting COVID-19, peacekeeping and escort services, humanitarian assistance, and international military cooperation.” Last week’s resolution on history was only third such document putting forth the official view on party history, following resolutions passed by Mao Zedong in 1945 and Deng Xiaoping in 1981. The new resolution dealt more with the future than the past. It essentially reaffirmed the official view on history, saying that the “basic points and conclusions” of past resolutions “remain valid to this day.” It repeated the conclusion reached in 1981 on Mao’s errors noting that “mistakes were made” and that “Mao Zedong’s theoretical and practical errors concerning class struggle in a socialist society became increasingly serious” leading to the disasters of the Cultural Revolution. Criticism of predecessors

Much of the new resolution focuses on emphasising Mr. Xi’s leadership and calling for the party to support his “core” status. It only briefly mentioned Mr. Xi’s predecessors Jiang Zemin and Hu Jintao, and implicitly critcised some aspects of their leadership including on military matters.

“For a period of time, the party’s leadership over the military was obviously lacking,” it noted. “If this problem had not been completely solved, it would not only have diminished the military’s combat capacity, but also undermined the key political principle that the party commands the gun.”

The document said Mr. Xi’s leadership had tightened supervision on the military including boosting “troop training and battle preparedness”, and it repeated China’s stated goals of completing the modernisation of its armed forces by 2035 and building a “world class” military by 2050, which observers see as meaning on par with the U.S.

‘Working vigorously’

“To build strong people’s armed forces, it is of paramount importance to uphold the fundamental principle and system of absolute party leadership over the military, to ensure that supreme leadership and command authority rest with the party Central Committee and the Central Military Commission (CMC), and to fully enforce the system of the CMC chairman assuming overall responsibility,” the resolution said, adding that “setting their sights on this problem, the Central Committee and the CMC have worked vigorously to govern the military with strict discipline in every respect.”

#### The commercial space sector is the PLAs central goal – the plan is a 180.

Bartholomew & Cleveland 19 – Carolyn and Robin, 4/25/19, Chairmen and Vice Chairmen. Section is written from Michael A. McDevitt, US Congressperson, [“HEARING ON CHINA IN SPACE: A STRATEGIC COMPETITION?,” <https://www.uscc.gov/sites/default/files/transcripts/April%2025%2C%202019%20Hearing%20Transcript%20%282%29.pdf>] Justin

As the Chairman said, China is determined to become a leading space power, which requires continuing to boost its innovation capabilities, both in its civilian and military sectors. The People’s Liberation Army is closely involved in most if not every aspect of China’s space program, from helping formulate and execute national space goals to overseeing China’s human spaceflight program. Coverage of China’s space program must treat seriously the implications of the reality that in many cases the boundaries between the military and civil silos of China’s program are thin, if they exist at all.

Our second panel today will address the application of what China calls its “military-civil fusion” strategy to its space sector. Military-civil fusion, a strategic concept designed to harness civilian sector innovation to power China’s military and technological modernization with the goal of leapfrogging the United States and becoming a technological powerhouse. Space has been designated as an especially important sector for military-civil fusion, and the impacts of this campaign on China’s burgeoning commercial space sector—itself a recipient of generous government support and protection—will be crucial as Chinese companies increasingly seek to compete in the international marketplace. Military-civil fusion is especially worthy of attention due to its continued reliance on technology transfer, by hook or by crook, to fuel China’s industrial and military growth.

Our third and final panel today will examine China’s military space and counterspace activities. Since its direct-ascent kinetic antisatellite test in 2007, which was responsible for a large amount of all space debris currently in Earth’s orbit, China has continued to invest in a variety of offensive antisatellite capabilities. Indeed, China’s counterspace arsenal contains many options: earlier this month, Acting Secretary of Defense Patrick Shanahan said China “has exercised and continues to develop” jamming capabilities; is deploying directed-energy counterspace weapons; has deployed an operational ground-based antisatellite missile system; and is prepared to use cyberattacks against U.S. space systems.

#### That triggers backlash – they don’t support restrictions and convince leaders not to do the plan.

Cheng 14 [Dean Cheng, Senior Research Fellow in the Asia Studies Center at the Heritage Foundation, Former Senior Analyst at the China Studies Division of the Center for Naval Analyses, Former Senior Analyst with Science Applications International Corporation, “Prospects for U.S.-China Space Cooperation”, Testimony before the Committee on Commerce, Science, and Transportation, United States Senate, 4/9/2014, https://www.heritage.org/testimony/prospects-us-china-space-cooperation]

At the same time, space is now a sector that enjoys significant political support within the Chinese political system. Based on their writings, the PLA is clearly intent upon developing the ability to establish “space dominance,” in order to fight and win “local wars under informationized conditions.”[8] The two SOEs are seen as key parts of the larger military-industrial complex, providing the opportunities to expose a large workforce to such areas as systems engineering and systems integration. It is no accident that China’s commercial airliner development effort tapped the top leadership of China’s aerospace corporations for managerial and design talent.[9] From a bureaucratic perspective, this is a powerful lobby, intent on preserving its interests. China’s space efforts should therefore be seen as political, as much as military or economic, statements, directed at both domestic and foreign audiences. Insofar as the PRC has scored major achievements in space, these reflect positively on both China’s growing power and respect (internationally) and the CCP’s legitimacy (internally). Efforts at inducing Chinese cooperation in space, then, are likely to be viewed in terms of whether they promote one or both objectives. As China has progressed to the point of being the world’s second-largest economy (in gross domestic product terms), it becomes less clear as to why China would necessarily want to cooperate with other countries on anything other than its own terms. Prospects for Cooperation Within this context, then, the prospects for meaningful cooperation with the PRC in the area of space would seem to be extremely limited. China’s past experience of major high-technology cooperative ventures (Sino–Soviet cooperation in the 1950s, U.S.–China cooperation in the 1980s until Tiananmen, and Sino–European space cooperation on the Galileo satellite program) is an unhappy one, at best. The failure of the joint Russian–Chinese Phobos–Grunt mission is likely seen in Beijing as further evidence that a “go-it-alone” approach is preferable. Nor is it clear that, bureaucratically, there is significant interest from key players such as the PLA or the military industrial complex in expanding cooperation.[10] Moreover, as long as China’s economy continues to expand, and the top political leadership values space efforts, there is little prospect of a reduction in space expenditures—making international cooperation far less urgent for the PRC than most other spacefaring states. [FOOTNOTE] [10]It is worth noting here that the Chinese Ministry of Foreign Affairs is not a part of the CCP Politburo, a key power center in China. Thus, the voice of the Ministry of Foreign Affairs is muted, at best, in any internal debate on policy. [END FOOTNOTE] If there is likely to be limited enthusiasm for cooperation in Chinese circles, there should also be skepticism in American ones. China’s space program is arguably one of the most opaque in the world. Even such basic data as China’s annual space expenditures is lacking—with little prospect of Beijing being forthcoming. As important, China’s decision-making processes are little understood, especially in the context of space. Seven years after the Chinese anti-satellite (ASAT) test, exactly which organizations were party to that decision, and why it was undertaken, remains unclear. Consequently, any effort at cooperation would raise questions about the identity of the partners and ultimate beneficiaries—with a real likelihood that the PLA would be one of them.

#### Himalayan war – goes global

Chellaney 17 [Dr. Brahma Chellaney, Professor of Strategic Studies at the Center for Policy Research and Fellow at the Robert Bosch Academy, PhD in International Studies from Jawaharlal Nehru University, “Why the Chinese Military’s Rising Clout Troubles Xi Jinping”, The National, 9/9/2017, https://www.thenational.ae/opinion/why-the-chinese-military-s-rising-clout-troubles-xi-jinping-1.626815?videoId=5754807360001]

China’s president Xi Jinping has stepped up his domestic political moves in the run-up to the critical 19th national congress of the Chinese Communist Party next month, but he is still struggling to keep the People’s Liberation Army (PLA) in line. China’s political system makes it hard to get a clear picture, yet Mr Xi’s actions underscore the troublesome civil-military relations in the country. Take the recent standoff with India that raised the spectre of a Himalayan war, with China threatening reprisals if New Delhi did not unconditionally withdraw its forces from a small Bhutanese plateau, which Beijing claims is Chinese territory. After 10 weeks, the face-off on the Doklam Plateau ended with both sides pulling back troops and equipment from the site on the same day, signalling that Beijing, not New Delhi, had blinked. The mutual-withdrawal deal was struck just after Mr Xi replaced the chief of the PLA’s joint staff department. This key position, equivalent to the chairman of the US joint chiefs of staff, was created only last year as part of Mr Xi’s military reforms to turn the PLA into a force “able to fight and win wars”. The Doklam pullback suggests that the removed chief, Gen Fang Fenghui, who has since been detained for alleged corruption, was an obstacle to clinching a deal with India. To be sure, this was not the first time that the PLA’s belligerent actions in the Himalayas imposed diplomatic costs on China. A classic case happened when Mr Xi reached India on a state visit in September 2014. He arrived on Indian prime minister Narendra Modi’s birthday with a strange gift for his host, a predawn Chinese military encroachment deep into India’s northern region of Ladakh. The encroachment, the worst in many years in terms of the number of intruding troops, overshadowed Mr Xi’s visit. It appeared bizarre that the military of an important power would seek to mar the visit of its own head of state to a key neighbouring country. Yet Chinese premier Li Keqiang’s earlier visit to New Delhi in 2013 was similarly preceded by a PLA incursion into another part of Ladakh that lasted three weeks. Such provocations might suggest that they are intentional, with the Chinese government in the know, thus reflecting a preference for blending soft and hard tactics. But it is also possible that these actions underscore the continuing “disconnect between the military and the civilian leadership” in China that then US defence secretary Robert Gates warned about in 2011.

During his 2014 India trip, Mr Xi appeared embarrassed by the accompanying PLA encroachment and assured Mr Modi that he would sort it out upon his return. Soon after he returned, the Chinese defence ministry quoted Mr Xi as telling a closed-door meeting with PLA commanders that “all PLA forces should follow the president’s instructions” and that the military must display “absolute loyalty and firm faith in the party”. Recently Xi conveyed that same message yet again when he addressed a parade marking the 90th anniversary of the PLA’s creation on August 1, 1927. Donning military fatigues, Mr Xi exhorted members of his 2.3-million-strong armed forces to “unswervingly follow the absolute leadership of the party.” Had civilian control of the PLA been working well, would Mr Xi repeatedly be demanding “absolute loyalty” from the military or asking it to “follow his instructions”? China does not have a national army; rather the party has an army. So the PLA has traditionally sworn fealty to the party, not the nation. Under Mr Xi’s two immediate predecessors, Hu Jintao and Jiang Zemin, the PLA gradually became stronger at the expense of the party. The military’s rising clout has troubled Mr Xi because it hampers his larger ambition. As part of his effort to reassert party control over the military, Mr Xi has used his anti-corruption campaign to ensnare a number of top PLA officers. He has also cut the size of the ground force and established a new command-and-control structure. But just as a dog’s tail cannot be straightened, asserting full civil control over a politically ascendant PLA is proving unachievable.

After all, the party depends on the PLA to ensure domestic order and sustain its own political monopoly. The regime’s legitimacy increasingly relies on an appeal to nationalism. But the PLA, with its soaring budgets and expanding role to safeguard China’s overseas interests, sees itself as the ultimate arbiter of nationalism. To make matters worse, Mr Xi has made many enemies at home in his effort to concentrate power in himself, including through corruption purges. It is not known whether the PLA’s upper echelon respects him to the extent to be fully guided by his instructions. In the past decade, the PLA’s increasing clout has led China to stake out a more muscular role. This includes resurrecting territorial and maritime disputes, asserting new sovereignty claims, and using construction activity to change the status quo. China’s cut-throat internal politics and troubled civil-military relations clearly have a bearing on its external policy. The risks of China’s rise as a praetorian state are real and carry major implications for international security.

#### Extinction.

Caldicott 17 – Helen, 2017, Founder of Physicians for Social Responsibility [“The new nuclear danger: George W. Bush's military-industrial complex,” The New Press]//Elmer

The use of Pakistani nuclear weapons could trigger a chain reac­tion. **Nuclear-armed India, an ancient enemy, could respond** in kind. China, India's hated foe, could react if India used her nuclear weapons, triggering a nuclear [war] ~~holocaust~~ on the subcontinent. If any of either **Russia** or **America**'s 2,250 strategic weapons on hair-trigger alert were launched either **accidentally** or **purposefully** in response, **nuclear winter** would ensue, meaning the **end of most life on earth**.

## Case

### Debris

#### Plan doesn’t solve debris – no norms on debris currently means it doesn’t matter if China’s shady

#### Status quo solves debris:

#### Russia’s ASATs are a massive alt cause but autonomous collision avoidance solves.

Kan 12/1 – Michael has been a PCMag reporter since October 2017. He covers a wide variety of news topics, including consumer devices, the PC industry, cybersecurity, online communities, and gaming. 12/1/21. [PC Mag, “Starlink Satellite Orbits Changed to Avoid Debris After Russia's Missile Test,” <https://www.pcmag.com/news/starlink-satellite-orbits-changed-to-avoid-debris-after-russias-missile>] Justin

SpaceX has altered the orbits for its Starlink satellites, likely to prevent them from colliding with debris from Russia’s anti-satellite missile test.

On Tuesday, SpaceX CEO Elon Musk mentioned the issue after NASA abruptly delayed a spacewalk on the International Space Station due to the threat of space debris. In his tweet, Musk said: “We had to shift some Starlink satellite orbits to reduce probability of collision. Not great, but not terrible either.”

Musk didn’t explicitly blame the space debris on Russia’s anti-satellite missile test. Nevertheless, the “Not great, but not terrible” quote may be a subtle jab at the Russian government. The same line is used in the HBO series Chernobyl, which dramatizes the 1986 nuclear plant disaster in the Soviet Union. (In the show, a nuclear plant worker utters the line “Not great, but not terrible,” when in reality the conditions at the facility are catastrophic.)

Last month, the US was quick to condemn Russia’s anti-satellite missile test, which involved the Kremlin sending up a missile to destroy one of its own defunct satellites. The ensuing impact caused hundreds of thousands of pieces of debris to spill out into orbit, according to the US.

Because space debris can travel up to 17,500 miles per hour, even a small artifact can cause serious damage if strikes a spacecraft or an astronaut. "Russia's dangerous and irresponsible behavior jeopardizes the long-term sustainability of outer space,” the US State Department said at the time.

However, Russia claims the resulting debris poses no danger to any space activity. The Kremlin also points out other countries have embarked on their own anti-satellite missile tests too.

To avoid space debris, SpaceX has equipped each Starlink satellite with an “autonomous collision avoidance” system. The same satellites will eventually descend and burn up in Earth’s atmosphere within one to five years if the propulsion system on board ever fails.

In his tweet, Musk added that the International Space Station and SpaceX’s own Dragon craft possess “micrometeorite shields,” which can withstand high-velocity impacts. However, spacesuits lack such protection, hence the need for NASA to cancel the spacewalk.

#### Physics and math proofs prove no impact.

Cairncross 17 [Duncan Cairncross, Retired Planetary Science Engineer, BSc in Mechanical Engineering from the University of Glasgow, Diploma in Management DMS, Business Administration and Management, General from Teeside University, Former Asset Management Officer for the Gore District Council, “Is the Kessler Syndrome Disputed By Some Scientists?”, Quora, 10/25/2017, https://www.quora.com/Is-the-Kessler-Syndrome-disputed-by-some-scientists

Lets look at some numbers - we are talking LEO - so anything very small will de-orbit itself quite fast from atmospheric drag

These lumps are going the same direction - at similar speeds - as our satellites - so we are not talking about km/sec impacts - just rifle bullet speeds - 300 m/sec at maximum and the vast majority would have much much lower speeds

Everything is in a torus

Altitude 100 km to 300 km, - 1000 km North to 1000 km South - and about 40,000 km long

200 x 2000 x 40,000 = volume 16 billion cubic km -

18,000 Big bits - 100 mm - including 1,200 satellites

750,000 “bullets” - 10 mm

150 million bits 1 mm

Small bits we will ignore as they will not be going fast enough relative to our satellite to cause damage - and they will de-orbit quite fast

So one “bullet” for every 21,000 cubic km

That does not sound like too dangerous a neighborhood!

What happens if start some sort of cascade?

There is not much to cascade - 18,000 - “big bits” - if each of them became 1000 “bullets” then we would have 18 million “bullets” + the existing 750,000 bullets

And that is erring on the generous side - these bits are mostly metallic and metals don’t shatter into lots of 10 mm bits when hit by rifle bullets

That would be one “bullet” for every 853 cubic km AND most of the “bullets” will not actually be going very fast

Some time in the future when we have a lot mor,e as in a 100,000 times as much stuff in orbit then the Kessler Syndrome may be possible

If you are worried about communication satellites way up there in geostationary orbit then the situation is even better - there is a LOT more space up there and we have boosted a lot less junk up to those orbits

It is worth tracking the big bits and making sure that most satellites are safely de-orbited? - YES

But worrying about a Kessler Syndrome? - no not really

#### They don’t care about a downed satellite – their evidence is hysteria.

Bowen 18 [Bleddyn Bowen, Lecturer in International Relations at the University of Leicester. The Art of Space Deterrence. February 20, 2018. https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/]

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

### Heg

#### Vote neg on presumption. Not a single card in the aff is about private space companies carrying out operations independent of the Chinese or Russian Governments. Means they solve none of their offense or they are extra T which is a voter because it allows them to artificially inflate aff solvency and skirt neg solvency deficits which makes it impossible to win

#### Control F appropriation – it literally only shows up in the plan text – none of their evidence is reverse casual or specific enough for solvency

#### Their aff only solves if they get to A. end private/public partnerships that are still headed by the Chinese space agency B. end manufacturing and sale of space goods to foreign governments.

#### AFF doesn’t solve sino-russia space alliance. The plan doesn’t solve Chinese companies’ production for Russian government appropriation. That means private companies still cooperate and prop up Russia’s space program post plan.

#### Zero evidence in the aff says private companies themselves are going to appropriate. China/Russia moon base mission is a state sponsored mission.

Laura Zhou 12-20 (She joined the Post's Beijing bureau in 2010. She covers China's diplomatic relations and has reported on topics such as Sino-US relations, China-India disputes, and reactions to the North Korea nuclear crisis, as well as other general news.)12/20/21, China, Russia set to renew cooperation deal as space rivalry with US escalates, SOUTH CHINA MORNING POST, https://www.scmp.com/news/china/diplomacy/article/3161600/china-russia-set-renew-cooperation-deal-space-rivalry-us

The plans were revealed at a time when China and Russia are moving closer in many areas, including space exploration. Respectively an established space power and a well-resourced latecomer, Russia and China have drawn up ambitious plans for missions that could compete with the US and its allies. In March, the CNSA and its Russian counterpart Roscosmos agreed to develop the International Lunar Research Station (ILRS), and in June, space officials from the two countries said they were in negotiations with international partners including the European Space Agency, Thailand, the United Arab Emirates and Saudi Arabia to join their exploratory endeavour. The new China-Russia ILRS plan was widely seen as a response to the US-led Artemis programme, announced in 2019 and aimed at returning astronauts from the US and its allies to the moon, specifically the lunar south pole, by 2025.

#### Be skeptical of their solvency claims, they read no evidence what happens post plan. Chinese companies are private enterprises in name only, that means the aff is easily circumvented.

#### CHINA’S COMMERICIAL SPACE INDUSTRY IS ACTUAL STATE CONTROLED, PROVES THEY CAN’T SOLVE SINCE CHINA’S SPACE PROGRAM STAYS INTACT – Strake Reads Green

**1AC Patel 21** — (Neel V. Patel, Neel is the space reporter for MIT Technology Review, and he writes The Airlock newsletter. Before joining, he worked as a freelance science and technology journalist, contributing stories to Popular Science, The Daily Beast, Slate, Wired, the Verge, and elsewhere. Prior to that, he was an associate editor for Inverse, where he grew and led the website’s space coverage., “China’s surging private space industry is out to challenge the US“, MIT Technology Review, 1-21-2021, Available Online at https://www.technologyreview.com/2021/01/21/1016513/china-private-commercial-space-industry-dominance, accessed 1-11-2022, HKR-AR)

Until recently, China’s space activity has been overwhelmingly dominated by two state-owned enterprises: the China Aerospace Science & Industry Corporation Limited (CASIC) and the China Aerospace Science and Technology Corporation (CASC). A few private space firms have been allowed to operate in the country for a while: for example, there’s the China Great Wall Industry Corporation Limited (in reality a subsidiary of CASC), which has provided commercial launches since it was established in 1980. But for the most part, China’s commercial space industry has been nonexistent. Satellites were expensive to build and launch, and they were too heavy and large for anything but the biggest rockets to actually deliver to orbit. The costs involved were too much for anything but national budgets to handle. That all changed this past decade as the costs of making satellites and launching rockets plunged. In 2014, a year after Xi Jinping took over as the new leader of China, the Chinese government decided to treat civil space development as a key area of innovation, as it had already begun doing with AI and solar power. It issued a policy directive called Document 60 that year to enable large private investment in companies interested in participating in the space industry. “Xi’s goal was that if China has to become a critical player in technology, including in civil space and aerospace, it was critical to develop a space ecosystem that includes the private sector,” says Namrata Goswami, a geopolitics expert based in Montgomery, Alabama, who’s been studying China’s space program for many years. “He was taking a cue from the American private sector to encourage innovation from a talent pool that extended beyond state-funded organizations.” As a result, there are now 78 commercial space companies operating in China, according to a 2019 report by the Institute for Defense Analyses. More than half have been founded since 2014, and the vast majority focus on satellite manufacturing and launch services. For example, Galactic Energy, founded in February 2018, is building its Ceres rocket to offer rapid launch service for single payloads, while its Pallas rocket is being built to deploy entire constellations. Rival company i-Space, formed in 2016, became the first commercial Chinese company to make it to space with its Hyperbola-1 in July 2019. It wants to pursue reusable first-stage boosters that can land vertically, like those from SpaceX. So does LinkSpace (founded in 2014), although it also hopes to use rockets to deliver packages from one terrestrial location to another. Spacety, founded in 2016, wants to turn around customer orders to build and launch its small satellites in just six months. In December it launched a miniaturized version of a satellite that uses 2D radar images to build 3D reconstructions of terrestrial landscapes. Weeks later, it released the first images taken by the satellite, Hisea-1, featuring three-meter resolution. Spacety wants to launch a constellation of these satellites to offer high-quality imaging at low cost. To a large extent, China is following the same blueprint drawn up by the US: using government contracts and subsidies to give these companies a foot up. US firms like SpaceX benefited greatly from NASA contracts that paid out millions to build and test rockets and space vehicles for delivering cargo to the International Space Station. With that experience under its belt, SpaceX was able to attract more customers with greater confidence. Venture capital is another tried-and-true route. The IDA report estimates that VC funding for Chinese space companies was up to $516 million in 2018—far shy of the $2.2 billion American companies raised, but nothing to scoff at for an industry that really only began seven years ago. At least 42 companies had no known government funding. And much of the government support these companies do receive doesn’t have a federal origin, but a provincial one. “[These companies] are drawing high-tech development to these local communities,” says Hines. “And in return, they’re given more autonomy by the local government.” While most have headquarters in Beijing, many keep facilities in Shenzhen, Chongqing, and other areas that might draw talent from local universities. There’s also one advantage specific to China: manufacturing. “What is the best country to trust for manufacturing needs?” asks James Zheng, the CEO of Spacety’s Luxembourg headquarters. “It’s China. It’s the manufacturing center of the world.” Zheng believes the country is in a better position than any other to take advantage of the space industry’s new need for mass production of satellites and rockets alike. Making friends The most critical strategic reason to encourage a private space sector is to create opportunities for international collaboration—particularly to attract customers wary of being seen to mix with the Chinese government. (US agencies and government contractors, for example, are barred from working with any groups the regime funds.) Document 60 and others issued by China’s National Development and Reform Commission were aimed not just at promoting technological innovation, but also at drawing in foreign investment and maximizing a customer base beyond Chinese borders. **“China realizes there are certain things they cannot get on their own,”** says Frans von der Dunk, a space policy expert at the University of Nebraska–Lincoln. Chinese companies like LandSpace and MinoSpace have worked to accrue funding through foreign investment, escaping dependence on state subsidies. And by avoiding state funding, a company can also avoid an array of restrictions on what it can and can’t do (such as constraints on talking with the media). Foreign investment also makes it easier to compete on a global scale: you’re taking on clients around the world, launching from other countries, and bringing talent from outside China. Although China is taking inspiration from the US in building out its private industry, the nature of the Chinese state also means these new companies face obstacles that their rivals in the West don’t have to worry about. While Chinese companies may look private on paper, they must still submit to government guidance and control, and accept some level of interference. It may be difficult for them to make a case to potential overseas customers that they are independent. The distinction between companies that are truly private and those that are more or less state actors is still quite fuzzy, especially if the government is a frequent customer. “That could still lead to a lack of trust from other partners,” says Goswami. It doesn’t help that the government itself is often very cagey about what its national program is even up to. And Hines adds that it’s not always clear exactly how separate these companies are from, say, the People’s Liberation Army, given the historical ties between the space and defense sectors. “Some of these things will pose significant hurdles for the commercial space sector as it tries to expand,” he says.

#### The Chinese private space sector has international customers so it doesn’t magically disappear post plan.

Liu 19, Irina (Research Analyst at Rhodium Group focusing on China's technological and industrial development), et al. Evaluation of China's Commercial Space Sector. Institute for Defense Analyses., 2019.

Section 5.2.3 on commercial activities in other countries in the 2016 White Paper states that China encourages and supports the participation of Chinese private companies in international commercial activities in the space field. For example, China has exported satellites and made inorbit delivery of Nigeria’s communications satellite, Venezuela’s remote-sensing Satellite-1, Bolivia’s communications satellite, Laos’ communications Satellite-1 and Belarus’ communications Satellite-1. In addition, China has provided commercial launch services for Turkey’s Gokturk-2 earth observation satellite. It has provided launch sharing services—launching small satellites for Ecuador, Argentina, Poland, Luxembourg, and other countries—when launching its own satellites. China has also offered business services concerning space information.

#### Plan gets circumvented – Domestic laws don’t apply and they ignore international ones too – Don’t allow new 1ar ev since I premised my 1n off a lack of enforcement ev

Maj. Ronald T. P. Alcala 18 (Assistant Professor in the Department of Law at the United States Military Academy, West Point, N.Y. Before joining the faculty, Major Alcala served as a Judge Advocate in a number of legal positions advising commanders on criminal law, international law, and administrative law issues.), Lt. Col. Eugene (John) Gregory and Lt. Col. Shane Reeves, 6/28/2018, China and the Rule of Law: A Cautionary Tale for the International Communityhttps://www.justsecurity.org/58544/china-rule-law-cautionary-tale-international-community/

* Idea of Fazhi really just means more communist control
* Tradition means they disguise legal language as neutral while rejecting norms of transparency
* Rule of Law as understood in China is to maintain the Party
* Can’t measure effectiveness of Laws since the Law is the Party
* They rule international law that violates their interests as illegitimate

**The Communist Party of China has been leading an extraordinary effort to transform the country into a fazhi (法制) nation or “a country under the rule of law.”** The phrase “fazhi” has become ubiquitous in China, where it is heralded in all forms of media, from simple banners and posters, to pop-up ads on the internet. In fact, China has become so enamored with fazhi the Party dedicated an entire session of the 18th Party Congress to the subject in 2014**. We should be cautious of accepting China’s endorsement of the “rule of law” at face value, however.** China’s notion of fazhi—and its conception of law more generally—differs substantially from how rule of law is universally understood. Recognizing how China’s cost-benefit approach to law erodes international norms and institutions should serve as a reminder that a stable, cooperative, rules-based international order requires a commitment to the restraining power of the law. In a 2004 report on Rule of Law and Transitional Justice, the UN Secretary General observed that central to the rule of law is the requirement that the State itself is accountable to laws that are publicly promulgated, equally enforced and independently adjudicated. Other common characteristics of a nation under the rule of law include adherence to the principles of “supremacy of law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision-making, legal certainty, and avoidance of arbitrariness and procedural and legal transparency.” Ultimately, rule of law requires that State power itself must be subordinate and accountable to—that is, restrained by—the law. China’s recent commitment to the “rule of law” has produced some admirable results. Its emphasis on legality in the past 20 years has generated a considerable body of sophisticated, high quality legislation. Meanwhile, an explosion in legal education—as measured by the increase in credentialed lawyers—has cultivated an impressive bar of domestic and international legal experts, while rapid construction of China’s legal infrastructure, to include courthouses and procuratorate (or prosecutors’) offices, has continued at an unprecedented pace. Indeed, Chinese President Xi Jinping has been so supportive of these developments that he established an annual Constitution Day highlighting the importance of law and the Constitution in establishing fazhi. Then, for the first time in Party history, he swore an oath to the Constitution, just like the leader of a rule of law nation would. **Despite the Party’s current encouragement of “rule of law” and its celebration of the Constitution, Chinese rule of law—officially called “socialist rule of law with Chinese characteristics”—differs fundamentally from rule of law as internationally understood. To begin with, all aspiring Chinese lawyers—at least according to the study material for one bar exam preparation course—must commit to the belief that law is subject to the “leadership of the Party.” The same bar review material further states that the fundamental principle of Chinese rule of law is to “maintain the rule of the Party.”** Meanwhile, a recent bar exam question affirmed that “Western Capitalist Rule of Law Thought” is not an “origin” of Chinese rule of law. Accordingly, rather than promote basic principles such as the supremacy of law, legal accountability, judicial independence, and fair treatment before the law, fazhi is instead used as a rhetorical tool to legitimize the Party’s rule. **It is the Party’s will restated in seemingly neutral and distinctly legal language, which draws on a long imperial tradition of legal discourse while rejecting norms of transparency and impartiality.** By evoking fazhi, the Party seeks to attain greater credibility, and in turn inspire greater compliance, by drawing on both the high prestige accorded to rule of law and the Chinese tradition of obedience to edicts of the ruler and the precedents of the dynasty (qianli 前例). It is not surprising, then, that despite the Chairman’s apparent enthusiasm for the Chinese Constitution, Chinese judges are still prohibited from citing the Constitution as a source of law. The Party smartly does not want to open that Pandora’s Box; doing so could wreak havoc on the Party. The heady days of Qi Yuling versus Chen Xiaoqi, decided in 2001, when the People’s Supreme Court cited the Constitution for the first time and seemed to signal a “sprout” of true Constitutionalism in China, are long over. While the Party wants “rule of law”—in the sense of an abundance of published law recognized and followed by the people—the highest levels of the Party do not want to be subject to the law or have the Party’s will ever be challenged by the law. This is a tall order as the Party needs the system to cast a wide and credible legal net (fawang huihui 法网恢恢) without creating the potential to ensnare the Party itself. Moreover, the Party needs the law to give the appearance of objective impartiality while simultaneously and reliably addressing cases that are of concern to the Party. More bluntly, the Party wants the credibility of impartial and independent law without the political danger. To successfully navigate these competing interests, the Chinese legal system has become both increasingly routine (often impartial at the case-adjudication level), yet also highly and efficiently responsive to the will of the Party. This emphasis on routine impartiality lends some credibility to the claim that China is transforming into a rule of law nation. Yet ultimately, the Chinese legal system remains an instrument of the Party. This is why it is possible for a petty criminal in Beijing’s Xindian District to receive a fair trial (as one of the authors observed two years ago) while a disgraced politician like Bo Xilai may be subjected to a show-trial. The Party’s current rule of law campaign sincerely and energetically seeks to promulgate laws and to compel the Chinese people to follow the law—or, as the Chinese saying goes, “to have law to follow” and to “follow the law that exists.” However, while adherence to fazhi may resemble a commitment to ideals such as legal accountability, legal certainty, and equality before the law, in fact “law” in China is a rhetorical restatement of the Party’s discretionary will using legal discourse. This should not be mistaken for rule of law as the animating (or constraining) force is not the supreme authority of law, but the will of the Party. Moreover, structural social differences, including what Lawrence Friedman described as internal and external legal cultures, help differentiate China from a nation under the rule of law. While the structure of Chinese and Western law is relatively comparable—legislators, law enforcement, trial and appellate courts, lawyers, judges, plaintiffs, bar associations—the internal legal culture (attitudes and practices of legal professionals) of China supports Party supremacy rather than actual rule of law. Transgressions of the law by the Party, therefore, regularly go unremarked and unaddressed. For example, it would never occur to a Chinese judge to issue an injunction against an order from Xi—and even if he wanted to, the judge would realize that the external legal culture (attitudes of the general population) in China would not support his decision either. While legal scholars need not object to China’s internal conception and application of law, they may rightly object to the Chinese appropriation of the term “rule of law” to describe what it is doing. At the very least, it is important to understand how China’s pragmatic use of law, and its refusal to be restrained by inconvenient law, correlates internationally, particularly as China uses its newfound wealth to demand a greater role in international rule-making and adjudication. Ultimately, it should not be taken for granted that China’s obeisance to international institutions and legal norms—like its acknowledgment of “rule of law” domestically—reflects a genuine commitment to international law. Each instance of compliance—even large-scale routine compliance—is a cost-benefit exercise for the Chinese. Although domestic law in China almost never openly conflicts with the Party’s will, the Party’s ability to bend international law to its will is far more restricted. Consequently, China has embraced international law and institutions when they can be used to advance its interests and has ferociously denounced them when they have not. Admittedly, this approach to international legal norms is merely pragmatic, and many States, including the United States, commonly engage in similar behavior. However, while States understandably interpret and apply international legal norms in ways that promote their national interests, China is conceptually incapable of viewing international law—with its collection of constraints and obligations—with the same deference as the rules-based international community. China simply does not believe that law by nature of its unique normative position has the power to constrain the will of the Party itself, either domestically or internationally, and this view is supported by both China’s internal and external legal cultures. China may comply with certain international norms that conflict with its national interest, not out of a respect for the rule of law, but rather as part of a pragmatic cost-benefit analysis. China’s establishment of an Air Defense Identification Zone (ADIZ) in the East China Sea provides one example of China’s acceptance and use of an international legal norm to advance its national interests. ADIZs were historically employed to deconflict air traffic and protect coastal states from unwanted intrusions into their sovereign airspace. Rather than use the East China Sea ADIZ to protect its sovereign airspace, however, China instead employs the ADIZ to assert sovereignty over the disputed Senkaku Islands. As one commentator described it, China’s “extraterritorial layering of sovereignty rights reverses the underlying rationale of ADIZ from defensive to offensive, from the protection of national sovereignty to the coercive extension of sovereignty beyond territorial limits.” Nevertheless, China readily adopted the ADIZ because it served a purpose consistent with the will of the Party. Moreover, it cast the Party’s will in a rules-based, safety-oriented international legal norm. In contrast, China vehemently denounced the 2016 arbitral award in the South China Sea Arbitration because it conflicted with its national interests and the will of the Party. Established pursuant to Annex VII of the 1982 UN Law of the Sea Convention (UNCLOS), to which China is a signatory, the arbitral tribunal rejected China’s claim to sovereign rights or jurisdiction over marine areas within China’s self-proclaimed “nine-dash line” in the South China Sea. Notably, China refused to accept the arbitral tribunal’s jurisdiction from the start, arguing that the essence of the arbitration was “territorial sovereignty,” which was “beyond the scope of the Convention,” and did not concern “the interpretation or application of the Convention.” The arbitral tribunal, however, held that it did have jurisdiction over almost all of the Philippines’ submissions and noted that despite China’s non-appearance at its proceedings, “China remains a Party to these proceedings, with the ensuing rights and obligations, including that it will be bound by any decision of the Tribunal.” Moreover, under UNCLOS, the international legal basis for arbitration and the effect of an award are clear: The award of an arbitral tribunal “shall be final and without appeal” and “shall be complied with by the parties to the dispute.” China’s response to the arbitral award, however, was dismissive. After first denouncing the Philippines’ “unilateral initiation of arbitration” (Article 1, Annex VII of UNCLOS provides that “any party to a dispute may submit the dispute to the arbitral procedure”) without first seeking to settle the dispute through negotiation (the arbitral tribunal found the Philippines “did seek to negotiate with China”), the statement then proceeds to repudiate not only the award but the tribunal itself. The statement asserts that the award is “null and void” and of “no binding force,” and declares that “China neither accepts nor recognizes it.” More ominously, the statement then attacks the integrity of the arbitral tribunal, claiming that its conduct and award “completely deviate from the object and purpose of UNCLOS,” “substantially impair the integrity and authority of UNCLOS,” and are “unjust and unlawful.” **China’s fierce reaction should not be surprising. In China, the Party can never violate the law because the Party’s will is the law. Similarly, an international decision that conflicts with the Party’s will is not merely wrong, but actually illegitimate. Meanwhile, an open assessment of China’s compliance with legal norms is not possible in Chinese society because the Party controls the machinery of discourse.** While the internal and external legal cultures of another State might have pushed back and debated the disparagement of an international legal body, in China the Party mobilized every venue of public discourse to vilify and delegitimize the decision. In fact, the moment the arbitral decision was issued, the Chinese universally dismissed it as naoju (闹剧), literally a “noisy play” or “farce,” indicating that putatively legal institutions, whether domestic or international—such as the arbitral tribunal—are only useful in so far as they comport with the Party’s will. This approach is consistent with China’s formal conception of the rule of law. **An effective rules-based international order requires that States accept the restraining power of the law. While China has acknowledged the importance of international law and observed legal norms when convenient, China’s cost-benefit approach to legal compliance ultimately rejects the supremacy and power of law as a restraining force. This view derives from its own conception of law as an expression of the Party’s will, nothing more. States that engage with China and those that consider China a reliable partner or fellow adjudicator in furthering the rules-based international order should understand its cost-benefit approach to the law and, consequently, how this influences its behavior. Of course, while undermining established norms and institutions when they frustrate perceived interests may weaken respect for the rule of law over time, from the Party’s perspective it’s simply a matter of perfecting fazhi.**

#### Yes they get durable fiat but that just means the plan gets passed and doesn’t get rolled back. Fiating perfect enforcement is a voter because it decks negative solvency deficits and allows them to wave the magic fiat wand instead of reading actual evidence. That creates unbeatable affs because they get to defend that China miraculously limits its own power to the benefit of the US and all their allies. Ask yourself, what is the neg to an aff about China waking up one day and deciding they want to act in the US best interest?

#### China Cyber’s a massive alt cause to heg

William J. Broad 21 is a (science journalist and senior writer at The New York Times. He shared two Pulitzer Prizes with his colleagues), 1/24/2021, How Space Became the Next ‘Great Power’ Contest Between the U.S. and China, Ny Times, <https://www.nytimes.com/2021/01/24/us/politics/trump-biden-pentagon-space-missiles-satellite.html>

China also sought to diversify its antisatellite force. A warhead could take hours to reach a high orbit, potentially giving American forces time for evasive or retaliatory action. Moreover, the speeding debris from a successful attack might endanger Beijing’s own spacecraft. In tests, China began [firing weak laser beams](https://www.uscc.gov/sites/default/files/Fisher_Combined.pdf) at satellites and studying other ways to strike at the speed of light. However, all the techniques were judged as [requiring years and perhaps decades of development](https://www.uscc.gov/sites/default/files/transcripts/China%27s%20Advanced%20Weapons.pdf). Then came the new idea. Every aspect of American space power was controlled from the ground by powerful computers. If penetrated, the brains of Washington’s space fleets might be degraded or destroyed. Such attacks, compared with every other antisatellite move, were also remarkably inexpensive. In 2005, China began to [incorporate cyberattacks](https://archive.defense.gov/pubs/pdfs/China_Military_Power_Report_2009.pdf) into its military exercises, primarily in first strikes against enemy networks. Increasingly, its [military doctrine called for paralyzing early attacks](https://www.uscc.gov/sites/default/files/annual_reports/annual_report_full_11.pdf). In 2008, [hackers seized control](https://www.uscc.gov/sites/default/files/annual_reports/annual_report_full_11.pdf) of a civilian imaging satellite named Terra that orbited low, like the military’s reconnaissance craft. They did so twice — first in June and again in October — roaming control circuits with seeming impunity. Remarkably, in both cases, the hackers achieved all the necessary steps to command the spacecraft but refrained from doing so, apparently to reduce their fingerprints.

#### No impact.

Mueller 21 [John; February 17; Adjunct Professor of Political Science and Senior Research Scientist at the Mershon Center for International Security Studies; The Stupidity of War: American Foreign Policy and the Case for Complacency, “The Rise of China, the Assertiveness of Russia, and the Antics of Iran,” Ch. 6]

Complacency, Appeasement, Self-destruction, and the New Cold War It could be argued that the policies proposed here to deal with the international problems, whether real or imagined, presented by China, Russia, and Iran constitute exercises not only in complacency, but also in appeasement. That argument would be correct. As discussed in the Prologue to this book, appeasement can work to avoid military conflict as can be seen in the case of the Cuban missile crisis of 1962. As also discussed there, appeasement has been given a bad name by the experience with Hitler in 1938. Hitlers are very rare, but there are some resonances today in Russia’s Vladimir Putin and China’s Xi Jinping. Both are shrewd, determined, authoritarian, and seem to be quite intelligent, and both are fully in charge, are surrounded by sychophants, and appear to have essentially unlimited tenure in office. Moreover, both, like Hitler in the 1930s, are appreciated domestically for maintaining a stable political and economic environment. However, unlike Hitler, both run trading states and need a stable and essentially congenial international environment to flourish.128 Most importantly, except for China’s claim to Taiwan, neither seems to harbor Hitler-like dreams of extensive expansion by military means. Both are leading their countries in an illiberal direction which will hamper economic growth while maintaining a kleptocratic system. But this may be acceptable to populations enjoying historically high living standards and fearful of less stable alternatives. Both do seem to want to overcome what they view as past humiliations – ones going back to the opium war of 1839 in the case of China and to the collapse of the Soviet empire and then of the Soviet Union in 1989–91 in the case of Russia. Primarily, both seem to want to be treated with respect and deference. Unlike Hitler’s Germany, however, both seem to be entirely appeasable. That scarcely seems to present or represent a threat. The United States, after all, continually declares itself to be the indispensable nation. If the United States is allowed to wallow in such self-important, childish, essentially meaningless, and decidedly fatuous proclamations, why should other nations be denied the opportunity to emit similar inconsequential rattlings? If that constitutes appeasement, so be it. If the two countries want to be able to say they now preside over a “sphere of influence,” it scarcely seems worth risking world war to somehow keep them from doing so – and if the United States were substantially disarmed, it would not have the capacity to even try. If China and Russia get off on self-absorbed pretensions about being big players, that should be of little concern – and their success rate is unlikely to be any better than that of the United States. Charap and Colton observe that “The Kremlin’s idee fixe that Russia needs to be the leader of a pack of post-Soviet states in order to be taken seriously as a global power broker is more of a feel-good mantra than a fact-based strategy, and it irks even the closest of allies.” And they further suggest that The towel should also be thrown in on the geo-ideational shadow-boxing over the Russian assertion of a sphere of influence in post-Soviet Eurasia and the Western opposition to it. Would either side be able to specify what precisely they mean by a regional sphere of influence? How would it differ from, say, US relations with the western-hemisphere states or from Germany’s with its EU neighbors?129 Applying the Gingrich gospel, then, it certainly seems that, although China, Russia, and Iran may present some “challenges” to US policy, there is little or nothing to suggest a need to maintain a large US military force-in-being to keep these countries in line. Indeed, all three monsters seem to be in some stage of self-destruction or descent into stagnation – not, perhaps, unlike the Communist “threat” during the Cold War. Complacency thus seems to be a viable policy. However, it may be useful to look specifically at a couple of worst-case scenarios: an invasion of Taiwan by China (after it builds up its navy more) and an invasion of the Baltic states of Estonia, Lithuania, and Latvia by Russia. It is wildly unlikely that China or Russia would carry out such economically self-destructive acts: the economic lessons from Putin’s comparatively minor Ukraine gambit are clear, and these are unlikely to be lost on the Chinese. Moreover, the analyses of Michael Beckley certainly suggest that Taiwan has the conventional military capacity to concentrate the mind of, if not necessarily fully to deter, any Chinese attackers. It has “spent decades preparing for this exact contingency,” has an advanced early warning system, can call into action massed forces to defend “fortified positions on home soil with precision-guided munitions,” and has supply dumps, booby traps, an wide array of mobile missile launchers, artillery, and minelayers. In addition, there are only 14 locations that can support amphibious landing and these are, not surprisingly, well-fortified by the defenders.130 The United States may not necessarily be able to deter or stop military attacks on Taiwan or on the Baltics under its current force levels.131 And if it cannot credibly do so with military forces currently in being, it would not be able to do so, obviously, if its forces were much reduced. However, the most likely response in either eventuality would be for the United States to wage a campaign of economic and military (including naval) harassment and to support local – or partisan – resistance as it did in Afghanistan after the Soviet invasion there in 1979. 132 Such a response does not require the United States to have, and perpetually to maintain, huge forces in place and at the ready to deal with such improbable eventualities. The current wariness about, and hostility toward, Russia and China is sometimes said to constitute “a new Cold War.”133 There are, of course, considerable differences. In particular, during the Cold War, the Soviet Union – indeed the whole international Communist movement – was under the sway of a Marxist theory that explicitly and determinedly advocated the destruction of capitalism and probably of democracy, and by violence to the degree required. Neither Russia nor China today sports such cosmic goals or is enamored of such destructive methods. However, as discussed in Chapters 1 and 2, the United States was strongly inclined during the Cold War massively to inflate the threat that it imagined the Communist adversary to present. The current “new Cold War” is thus in an important respect quite a bit like the old one: it is an expensive, substantially militarized, and often hysterical campaign to deal with threats that do not exist or are likely to selfdestruct.134 It may also be useful to evaluate terms that are often bandied about in considerations within foreign policy circles about the rise of China, the assertiveness of Russia, and the antics of Iran. High among these is “hegemony.” Sorting through various definitions, Simon Reich and Richard Ned Lebow array several that seem to capture the essence of the concept: domination, controlling leadership, or the ability to shape international rules according to the hegemon’s own interests. Hegemony, then, is an extreme word suggesting supremacy, mastery, preponderant influence, and full control. Hegemons force others to bend to their will whether they like it or not. Reich and Lebow also include a mellower designation applied by John Ikenberry and Charles Kupchan in which a hegemon is defined as an entity that has the ability to establish a set of norms that others willingly embrace.135 But this really seems to constitute an extreme watering-down of the word and suggests opinion leadership or entrepreneurship and success at persuasion, not hegemony. Moreover, insofar as they carry meaning, the militarized application of American primacy and hegemony to order the world has often been a fiasco.136 Indeed, it is impressive that the hegemon, endowed by definition by what Reich and Lebow aptly call a grossly disproportionate military capacity, has had such a miserable record of military achievement since 1945 – an issue discussed frequently in this book.137 Reich and Lebow argue that it is incumbent on IR scholars to cut themselves loose from the concept of hegemony.138 It seems even more important for the foreign policy establishment to do so. There is also absurdity in getting up tight over something as vacuous as the venerable “sphere of influence” concept (or conceit). The notion that world affairs are a process in which countries scamper around the world seeking to establish spheres of influence is at best decidedly unhelpful and at worst utterly misguided. But the concept continues to be embraced in some quarters as if it had some palpable meaning. For example, in early 2017, the august National Intelligence Council opined that “Geopolitical competition is on the rise as China and Russia seek to exert more sway over their neighboring regions and promote an order in which US influence does not dominate.”139 Setting aside the issue of the degree to which American “influence” could be said to “dominate” anywhere (we still wait, for example, for dominated Mexico supinely to pay for a wall to seal off its self-infatuated neighbor’s southern border), it doesn’t bloody well matter whether China or Russia has, or seems to have, a “sphere of influence” someplace or other. More importantly, the whole notion is vapid and essentially meaningless. Except perhaps in Gilbert and Sullivan’s Iolanthe. When members of the House of Lords fail to pay sufficient respect to a group of women they take to be members of a ladies’ seminary who are actually fairies, their queen, outraged at the Lords’ collected effrontery, steps forward, proclaims that she happens to be an “influential fairy,” and then, with a few passes of her wand, brushes past the Lords’ pleas (“no!” “mercy!” “spare us!” and “horror!”), and summarily issues several edicts: a young man of her acquaintance shall be inducted into their House, every bill that gratifies his pleasure shall be passed, members shall be required to sit through the grouse and salmon season, and high office shall be obtainable by competitive examination. Now, that’s influence. In contrast, on December 21, 2017, when the United States sought to alter the status of Jerusalem, the United Nations General Assembly voted to repudiate the US stand in a nearly unanimous vote that included many US allies. Now, that’s not influence. In fact, to push this point perhaps to an extreme, if we are entering an era in which economic motivations became paramount and in which military force is not deemed a sensible method for pursuing wealth, the idea of “influence” would become obsolete because, in principle, pure economic actors do not care much about influence. They care about getting rich. (As Japan and Germany have found, however, influence, status, and prestige tend to accompany the accumulation of wealth, but this is just an ancillary effect.) Suppose the president of a company could choose between two stories to tell the stockholders. One message would be, “We enjoy great influence in the industry. When we talk everybody listens. Our profits are nil.” The other would be, “No one in the industry pays the slightest attention to us or ever asks our advice. We are, in fact, the butt of jokes in the trade. We are making money hand over fist.” There is no doubt about which story would most thoroughly warm the stockholders’ hearts.