### 1

#### Interpretation – the aff may not defend that the appropriation of outer space by a certain set of private entities is unjust.

#### Entities is a generic bare plural

**Nebel 20** [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs. He writes a lot of this stuff lol – duh.] “Indefinite Singular Generics in Debate” Victory Briefs, 19 August 2020. no url AG

I agree that if “a democracy” in the resolution just meant “one or more democracy,” then a country-specific affirmative could be topical. But, as I will explain in this topic analysis, that isn’t what “a democracy” means in the resolution. To see why, we first need to back up a bit and review (or learn) the idea of generic generalizations.

The most common way of expressing a generic in English is through a *bare plural*. **A bare plural is a plural noun phrase, like “dogs” and “cats,” that lacks an overt determiner**. (A determiner is **a word that tells us which or how many**: determiners include quantifier words like “all,” “some,” and “most,” demonstratives like “this” and “those,” posses- sives like “mine” and “its,” and so on.) LD resolutions often contain bare plurals, and **that is the most common clue to their genericity**.

We have already seen some examples of generics that are not bare plurals: “A whale is a mammal,” “A beaver builds dams,” and “The woolly mammoth is extinct.” The first two examples use indefinite singulars—singular nouns preceded by the indefinite article “a”—and the third is a definite singular since it is preceded by the definite article “the.” Generics can also be expressed with bare singulars (“Syrup is viscous”) and even verbs (as we’ll see later on). The resolution’s “a democracy” is an indefinite singular, and so it very well might be—and, as we’ll soon see, is—generic.

But it is also important to keep in mind that, just as not all generics are bare plurals, not all bare plurals are generic. “Dogs are barking” is true as long as some dogs are barking. Bare plurals can be used in particular ways to express existential statements. The key question for any given debate resolution that contains a bare plural is whether that occurrence of the bare plural is generic or existential.

The same is true of indefinite singulars. As debaters will be quick to point out, some uses of the indefinite singular really do mean “some” or “one or more”: “A cat is on the mat” is clearly not a generic generalization about cats; it’s true as long as some cat is on the mat. The question is whether the indefinite singular “a democracy” is existential or generic in the resolution.

Now, my own view is that, if we understand the difference between existential and generic statements, and if we approach the question impartially, without any invest- ment in one side of the debate, we can almost always just tell which reading is correct just by thinking about it. **It is clear that “In a democracy, voting ought to be compul- sory” doesn’t mean “There is one or more democracy in which voting ought to be com- pulsory.”** I don’t think a fancy argument should be required to show this any more than a fancy argument should be required to show that “A duck doesn’t lay eggs” is a generic—a false one because ducks do lay eggs, even though some ducks (namely males) don’t. And if a debater contests this by insisting that “a democracy” is existen- tial, the judge should be willing to resolve competing claims by, well, judging—that is, by using her judgment. Contesting a claim by insisting on its negation or demanding justification doesn’t put any obligation on the judge to be neutral about it. (Otherwise the negative could make every debate irresolvable by just insisting on the negation of every statement in the affirmative speeches.) Even if the insistence is backed by some sort of argument, we can reasonably reject an argument if we know its conclusion to be false, even if we are not in a position to know exactly where the argument goes wrong. Particularly in matters of logic and language, speakers have more direct knowledge of particular cases (e.g., that some specific inference is invalid or some specific sentence is infelicitious) than of the underlying explanations.

But that is just my view, and not every judge agrees with me, so it will be helpful to consider some arguments for the conclusion that we already know to be true: that, even if the United States is a democracy and ought to have compulsory voting, that doesn’t suffice to show that, in a democracy, voting ought to be compulsory—in other words, that “a democracy” in the resolution is generic, not existential.

Second, **existential uses of the indefinite, such as “A cat is on the mat,” are upward- entailing.3 This means that if you replace the noun with a more general one, such as “An animal is on the mat,” the sentence will still be true. So let’s do that with “a democracy.” Does the resolution entail “In a society, voting ought to be compulsory”? Intuitively no**t, because you could think that voting ought to be compulsory in democracies but not in other sorts of societies. This suggests that “**a democracy” in the resolution is not existential**.

#### It applies to this topic – a] entities is an existential bare plural bc it has no determiner b] The sentence “The appropriation of outer space by private entities is unjust” does not imply “the appropriation of outer space by private and public entities is unjust”

#### Violation – they spec Chinese private entities

#### Standards

#### 1] Limits – they can spec infinite different entities like spaceX, etc.. - that’s supercharged by the ability to spec combinations of types of entities. This takes out functional limits – it’s impossible for me to research every possible combination of entities, governments, and appropriation.

#### 2] TVA solves – just read your aff as an advantage to a whole rez aff – we don’t stop them from reading new FWs, mechanisms or advantages. PICs aren’t aff offense – a] it’s ridiculous to say that neg potential abuse justifies the aff being non-T b] There’s only a small number of pics on this topic c] PICs incentivize them to write better affs that can generate solvency deficits to PICs

Competing interps

RVI

DTD

### 2

#### Space domination is central to Xi’s vision of China – his leadership and regime depends upon a substantial victory against the United States in the space race.

Shepherd and Kygne 21 [James Kynge is global China editor, based in Hong Kong. He is also editor of #techAsia, the leading newsletter on new Asian tech themes that covers the whole region including China, India, south-east Asia and Japan. Christian Shepherd is a former Beijing correspondent.] “China’s ambitions in space: national pride or taking on the Americans?,” May 8th, 2021, <https://www.ft.com/content/8a6bb0c0-9a6f-46c0-8438-48984c5e32dc>, VM

“For Xi, the space station is at the centre of his **vision of China** as a **“space power** in all respects” — a global **leader** of scientific **endeavours,** economic activity and military might in space. Half a century after it was inaugurated, China’s space programme has grown from the handful of scientists launching a satellite from the Gobi desert to become an important source of prestige and legitimacy for the party. Once the space station is completed next year, after a series of additional launches to add scientific laboratory modules, crew and cargo, it will pave the way for crewed missions that aim to take Chinese astronauts, or “taikonauts”, to the Moon some time after 2030. Beyond human space flight, China is also hoping to land its first rover on Mars later this month. Its commercial space industry boasts **more than 150 companies** vying to build satellites and launch rockets to meet ballooning demand for extraterrestrial infrastructure and services. At the same time, Moscow and Beijing agreed in March to work together to build a lunar research base. “As with the US, the Soviet Union and Russia, building a space station is highly symbolic, it is highly visible and it is perhaps uniquely arousing of **patriotic sentiment**,” says Alanna Krolikowski, a scholar at the Missouri University of Science and Technology. “It’s the equivalent of building cathedrals in the 21st century.” China wants to be seen as a creator and innovator of the next transformative technologies, Krolikowski adds. Demonstrations of world-leading breakthroughs are in especially high demand ahead of the centenary year of the party’s founding, which will be celebrated in July. “Social instability might be what keeps China’s leaders up at night but what gets them out of bed in the morning is making China a science and technology **superpower**,” she says. But beneath that grand narrative lurks a dangerous mixture of political mistrust and a lack of international co-ordination that threatens to undermine Beijing’s bid to reap the prestige and economic rewards from being **a space superpower**. China has developed advanced weaponry capable of knocking out US satellites — part of a growing competition in space with the American military. Analysts fear that an accelerated pace of rocket and satellite launches, combined with a reluctance to share details of projects deemed of critical national importance, creates ripe conditions for it to stumble into a new space arms race with the US, whether it wants one or not. One core problem is separating out Beijing’s peaceful and **aggressive goals in space**. “The difficulty for western policymaking about China’s space programme is that we don’t know what [Beijing] wants to do,” says Mark Hilborne, an expert in defence studies at King’s College London.”

#### Reduction of space programs specifically hurts China’s goal

Fabian ‘19[Christopher David Fabian – written as part of the author’s completion of a Masters in Science (Space Studies) from the University of North Dakota. Fabian holds a BA from the US Air Force Academy and was a Captain in the SPCS - a space control unit tasked with providing 24/7 support to the space sensor network (SSN), maintaining the space catalog and managing United States Strategic Command’s (USSTRATCOM) space situational awareness (SSA) sharing program to United States, foreign government, and commercial entities. The author’s thesis was Chaired and overseen by field expert Dr. Michael S. Dodge. Dodge currently serves as an Assistant Professor & Director of Graduate Studies in the Department of Space Studies at the University of North Dakota. Prior to joining the faculty at UND, Prof. Dodge was Research Counsel & Law Instructor at the University of Mississippi School of Law's program in Air & Space Law. Before teaching at UoM Law, Prof. Dodge received his LL.M. degree in Aviation & Space Law from McGill University in the Fall of 2011 (thesis: “Global Navigation Satellite Systems (GNSS) and the GPS-Galileo Agreement”). Before attending McGill, he obtained his J.D. in 2008 from the University of Mississippi School of Law, where he was also the first recipient of the Certificate in Remote Sensing, Air, and Space Law. He obtained dual degrees in B.S. (in Biological Sciences) and B.A. (in Philosophy) in 2005, from the University of Southern Mississippi. – “A Neoclassical Realist’s Analysis Of Sino-U.S. Space Policy” - May 2019 –#E&F - <https://commons.und.edu/cgi/viewcontent.cgi?article=3456&context=theses>]

Space power and manned space accomplishments serve to benefit China in five ways. First, success in space forms a nationalist narrative and creates a positive focal point for national pride, counter to the negative images of the Tianamen Square massacre and China’s consistently poor human rights record. 117 Maintaining an independent and self-reliant space program helps the CCP craft a narrative based on technological development, social progress, and sustainable development. This lends legitimacy to CCP leadership of China and stokes nationalism. 118 Additionally, the dissemination and control of satellite communication gives the CCP a medium by which to propagate its own political interpretation of world events.119

Second, the economic benefit gained from China’s space program is essential to upholding the informal social contract between the Chinese people and the CCP, one that is based on continued economic growth and an increase in quality of life. China seeks to make its space program a driver of economic and technological advancement in a variety of ways. Primarily, they *believe* that spin-off technologies from the space program could have up to a 1:10 cost to benefit ratio.120 This creates a cycle where the Chinese space program generates technology, technology spurs economic development, and economic development supports the space program.121 The export of commercial space services will be a driver of economic development as a producer of both jobs and hard currency. 122 Additionally, the space industry spurs the development of a high technology industry by creating a market for high-skill labor and products. 123 The industrial and academic base required for the development of a strong space program is projected to have multi-order effects across other key industries and inspire young Chinese to pursue a career in the sciences.124 Next, the use of satellite application technologies is critical to China’s economic development.125 The use of geological, weather, and positional data is essential to developing China’s limited resources and guarding her fragile environment.126 A multitrillion-dollar infrastructure project called the Belt-and-Road Initiative (BRI) was announced by Xi in 2013. The purpose of this project is to harness latent Chinese industrial capacity to enhance strategic connection between China and the rest of the Eurasian landmass.127 China’s space development has been specifically linked to BRI by the China National Space Administration’s (CNSA) director of international cooperation, Jiang Hui. In a brief to the United Nations Office for Outer Space Affairs (UNOOSA), Hui highlighted a long term plan focused on building the Chinese space industry and leveraging space capabilities (particularly geospatial, communication, and navigation systems) to build a spatial information corridor.128

Third, China is using spacepower as a way to develop prestige and reap soft power gains. The success of the Chinese space program infers significant leadership connotation in the region and is intended to establish Beijing at the forefront of Asia’s technology and economic development. 129 Orbital accomplishments and space technology development is *seen* as a herald for advancement in agriculture, resource management, communications, and disaster management as well as a symbol of national scientific and economic infrastructures. Therefore, they play a deeply symbolic role in Asia, with significant prestige to be gained by accomplishing space “firsts” within the region. 130 Beijing has made an effort to translate the success of its space program for the purposes of seizing regional leadership, boosting soft power, and incorporating space into BRI. 131 It created the Asia Pacific Space Cooperation Organization (APSCO) in 2008, which consists of China, Iran, Mongolia, Peru, Bangladesh, Pakistan, Turkey, Indonesia, and Thailand.132 China has donated ground systems, personnel training, and remote sensing data to member countries.133 Two other major Asian space cooperation organizations exist: the Japanese created and led Asian-Pacific Space Agency Forum (APRSAF) and the Indian created and led Center for Space Science and Technology Education in Asia and the Pacific (CSSTEAP).134 The purpose of these organizations is to reduce the costs of expensive space programs through resource pooling and increasing diplomatic ties between partner nations. Unfortunately, member nation overlap is mostly limited to smaller countries, and the presence of three competing organizations in the same region, each with similar missions led by separate space powers, may result in factionalism rather than cooperation.135 In addition to strengthening China economically, the export of commercial space services and the use of satellite application technologies may also have far reaching diplomatic benefits. China has served as an eager provider of space services and technologies to international markets, particularly for developing countries.136 Providing low-cost, partially subsidized space services to developing nations is a powerful diplomatic initiative relating to resource extraction and basing rights. 137 China provided Brazil a low-cost alternative to the LANDSAT remote sensing data via a cooperative venture called Chinese-Brazilian Earth Resources Satellite (CBERS). The cost was split 70/30 by China and Brazil.138 China manufactured, launched, and operated communications and imaging satellites for oil rich Venezuela.139 Similarly, China generously subsidized Nigeria’s first communications satellite for $550M as part of the BRI, with Nigerian oil rights serving as collateral.140 Bolivia enjoyed a similar arrangement, as 85% of its first communications satellite was subsidized by loans from China and built by the Great Wall Industry Corporation.141 Likewise, China designed, launched, and heavily subsidized a Pakistani geosynchronous communication satellite under BRI in exchange for Beidou ground stations in Karachi and Lahore. 142 This was followed by the development and launch of a remote sensing satellite in 2018.143 These acts of space diplomacy are consistent with China’s larger foreign policy efforts to open international markets.

Fourth, the Chinese space program sets the groundwork for scientific and economic exchange between China and Europe. Since the 1960s, Europe has sought independence from the U.S. space industry. Aside from the general predilection to maintain sovereignty, this desire has been amplified by a series of heavy handed U.S. space policy decisions. During the acquisition and early assembly of the space station throughout the 1980s and 1990s, Europeans were frustrated with the partnership with the U.S. Rapidly changing requirements and budget cuts gave them reason to enter negotiations with less than full faith in U.S. commitments. The nature of this partnership made Europeans feel as though they were being treated as a subcontractor rather than a full partner, and constantly proliferating Department of Defense (DoD) requirements served as an early example of Pentagon influence in civilian space.145 The Gulf War and the subsequent emphasis on space as a military technology in U.S. policy led Europe to grow weary of U.S. shutter control for commercial assets and selective service for government owned utilities.146 Likewise, the Cox report and corresponding restrictive export control initiatives (ITAR) and Export Administration Regulation (EAR) in the early 2000s caused backlash in Europe, creating a demand for export-control-free products and leading Europe to seek non-U.S. markets for its space technology.147 Wariness of U.S. restrictions created a mutual desire for ITAR-free products. Europe primarily seeks to gain a market for high technology products while China seeks training and scientific exchange.148 These desires drive Sino-E.U. cooperation and set the foundation for China’s science and technology diplomacy to Europe. 149 In the past decade, increasing parity between U.S. and “rest-of-world” technologies has made ITAR free products more feasible.150

Fifth, the opportunity cost of the perpetual “guns verses butter” debate applies to the space domain as well. For example, the U.S. military’s space budget is over $12 billion (unclassified spending) while NASA’s projected FY2019 budget is $21 billion.151 A system of mutual restraint would have the benefit of potentially freeing up billions of dollars from the military space budget to dedicate to civilian space spending. Although military space spending would remain high, a significant amount of money could be cut from space control spending ($2B), reducing the cost of existing military space projects due to loosened requirements on survivability, redundancy, and maneuverability. 152 Although China’s government spending is opaque, rough estimates are available. As of 2017, the U.S. spends approximately $610B (3.1% of GDP) annually on defense while China spends only $228B (1.9% of GDP).153 In terms of purchase power parity (PPP), China’s actual budget doubles to $434B.154 Likewise, China’s $3.5B space budget appears to be dwarfed by U.S. space spending. However, when % of GDP and PPP are taken into account, China appears to be much more competitive with the U.S. in terms of space budget. 155 Therefore, it is expected that China will reap similar budgetary benefits from a system of mutual restraint. This adds an even stronger incentive for both nations to cooperate.

In an absolute sense, the benefits of free access to space and the ability to pursue robust commercial utilization gives the impression of a strong desire for mutual cooperation. However, the zero-sum relationship should not be overlooked. The market for space technology is both limited and competitive, meaning that free access to space and the development of the space industry free from tariff or political restriction benefits China significantly, to the extent that it can increase relative market share in the $320 billion space economy. 156 Moving beyond competition within the space industry, the relative gain that the U.S. and China each derive from the utilization of space modifies the magnitude of preference for mutual cooperation. For example, if China gains X from a system of mutual cooperation while the U.S. gains X + 15, then the magnitude of China’s preference for this outcome must be proportionally lower than that of the U.S. Although the multi-order effects of the space industry are difficult to quantify, a simple analysis of spending and space assets can give an estimate of the relative importance of each nation’s space program. Table 1 is a quick reference comparing U.S. and Chinese space assets. 157

#### That’s key to strength and legitimacy

Perlez 17 [Jane Perlez and Chris Buckley, 1-24-2017, citing Paul Haenle, Director of the Carnegie-Tsinghua Center for Global Policy in Beijing, also served as China director for the National Security Council under Presidents Bush and Obama, and Minxin Pei, cited above. "Trump Injects High Risk Into Relations With China," New York Times, https://www.nytimes.com/2017/01/24/world/asia/trump-us-china-trade-trans-pacific-partnership.html]

The next few months, as Mr. Xi focuses on choosing new members of the ruling Standing Committee for his second five-year term, will be a particularly tense political period, and economic instability is the last thing he needs. Similarly, he will try at all costs to appear strong to his domestic, nationalistic audience in the face of challenges from Mr. Trump on Taiwan and the South China Sea. Mr. Trump has suggested that the One China policy, under which the United States recognizes the government of Beijing and not Taiwan, is not sacrosanct, a major concern for Mr. Xi. Mr. Xi toured the Boeing assembly plant outside of Seattle in 2015. In a trade war, China could reduce imports of American aircraft from Boeing and agricultural products. Credit Pool photo by Jason Redmond “In a year of political transition, Xi cannot afford to come across as weak,” said Paul Haenle, the director of the Carnegie-Tsinghua Center for Global Policy in Beijing, who served as China director for the National Security Council under President George W. Bush and President Barack Obama. “Taiwan is the core of core issues for China — a bottom line. Many Chinese stress that it is nonnegotiable.” But for now, at least, the increased contention with Washington is likely to strengthen Mr. Xi’s political hand at home by rallying public and elite support against a foreign threat, said Minxin Pei, a professor at Claremont McKenna College in California who studies Chinese politics and Chinese-American relations. “Short term, it will almost certainly give the Chinese government a boost in its public support,” Dr. Pei said in a telephone interview. “It helps Xi, because whenever there is such pressure from outside, Chinese officials tend to rally around the top leader.”

#### Taiwan war

**Norris, 17** -- Texas A&M Chinese foreign and security policy professor

[William, he teaches graduate-level courses in Chinese domestic politics, East Asian security, and Chinese foreign policy, he is also a nonresident associate with the nuclear policy program at the Carnegie Endowment for International Peace, "Geostrategic Implications of China’s Twin Economic Challenges," June 2017, https://www.cfr.org/sites/default/files/report\_pdf/Discussion\_Paper\_Norris\_China\_OR.pdf, accessed 9-4-19, footnote 23 included]

Populist pressures might tempt the party leadership to encourage diversionary nationalism. The logic of this concern is straightforward: the Communist Party might seek to distract a restless domestic population with adventurism abroad.19 The Xi administration wants to appear tough in its defense of foreign encroachments against China’s interests. This need stems from a long-running narrative about how a weak Qing dynasty was unable to defend China in the face of European imperial expansion, epitomized by the Opium Wars and the subsequent treaties imposed on China in the nineteenth century. The party is particularly sensitive to perceptions of weakness because much of its claim to legitimacy—manifested in Xi’s Chinese Dream campaign today—stems from the party’s claims of leading the restoration of Chinese greatness. For example, the May Fourth Movement, a popular protest in 1919 that helped catalyze the CPC, called into question the legitimacy of the Republic of China government running the country at that time because the regime was seen as not having effectively defended China’s territorial and sovereignty interests at the Versailles Peace Conference.

Diversionary nationalist frictions would likely occur if the Chinese leadership portrayed a foreign adversary' as having made the first move, thus forcing Xi to stand up for China’s interests. An example is the 2012 attempt by the nationalist governor of Tokyo, Shintaro Ishihara, to buy the Senkaku/Diaoyu Islands from a private owner.20 Although the Japanese central government sought to avert a crisis by stepping in to purchase the islands—having them bought and administered by Ishihara’s Tokyo metropolitan government would have dragged Japan into a confrontation with China—China saw this move as part of a deliberate orchestration by Japan to nationalize the islands. Xi seemingly had no choice but to defend China’s claims against an attempt by Japan to consolidate its position on the dispute.21 This issue touched off a period of heated tensions between China and Japan, lasting more than two years.22 Such dynamics are not limited to Japan. Other possible areas of conflict include, but are not necessarily limited to, Taiwan, India, and the South China S

ea (especially with the Philippines and Vietnam).

The Chinese government will use such tactics if it believes that the costs are relatively low. Ideally, China would like to appear tough while avoiding material repercussions or a serious diplomatic breakdown. Standing up against foreign encroachment—without facing much blowback—could provide Xi’s administration with a tempting source of noneconomic legitimacy'. However, over the next few years, Xi will probably not be actively looking to get embroiled abroad. Cushioning the fallout from slower growth while managing a structural economic transition will be difficult enough. Courting potential international crises that distract the central leadership would make this task even more daunting.

Even if the top leadership did not wish to provoke conflict, a smaller budgetary allotment for security could cause military interests in China to deliberately instigate trouble to justify their claims over increasingly scarce resources. For example, an air force interested in ensuring its funding for a midair tanker program might find the existence of far-flung territorial disputes to be useful in making its case. Such a case would be made even stronger by a pattern of recent frictions that highlights the necessity of greater air power projection. Budgetary pressures may be partly behind a recent People’s Liberation Army reorganization and headcount reduction. A slowing economy might cause a further deceleration in China’s military spending, thus increasing such pressures as budgetary belts tighten.

CHALLENGES TO XI’S LEADERSHIP

Xi Jinping’s efforts to address economic challenges could fail, unleashing consequences that extend well beyond China’s economic health. For example, an economic collapse could give rise to a Vladimir Putin-like redemption figure in China. Xi’s approach of centralizing authority over a diverse, complex, and massive social, political, and economic system is a recipe for brittleness. Rather than designing a resilient, decentralized governance structure that can gracefully cope with localized failures at particular nodes in a network, a highly centralized architecture risks catastrophic, system-level failure. Although centralized authority offers the tantalizing chimera of stronger control from the center, it also puts all the responsibility squarely on Xi’s shoulders.

With China’s ascension to great power status, the consequences of internecine domestic political battles are increasingly playing out on the world stage. The international significance of China’s domestic politics is a new paradigm for the Chinese leadership, and one can expect an adjustment period during which the outcome of what had previously been relatively insulated domestic political frictions will likely generate unintended international repercussions. Such dynamics will influence Chinese foreign policy and security behavior. Domestic arguments over ideology, bureaucratic power struggles, and strategic direction could all have ripple effects abroad. Many of China’s party heavyweights still employ a narrow and exclusively domestic political calculus. Such behavior increases the possibility of international implications that are not fully anticipated, raising the risks of strategic miscalculation on the world stage. For example, the factional power struggles that animated the Cultural Revolution were largely driven by domestic concerns, yet manifested themselves in Chinese foreign policy for more than a decade. During this period, China was not the world’s second largest economy and, for much of this time, did not even have formal representation at the United Nations. If today’s globally interconnected China became engulfed in similar domestic chaos, the effects would be felt worldwide.23

23. This outcome is only one of several potentially dangerous consequences. Others include a rebellious military, destabilizing foreign policy, outright civil war, renewed military conflict with Taiwan, virulent anti-Americanism, and financial collapse and contagion.

#### Goes nuclear – intermingled assets guarantee use-or-lose pressures.

Talmadge 18 – Associate Professor of Security Studies at the Edmund A. Walsh School of Foreign Service at Georgetown University, this essay is adapted from “Would China Go Nuclear? Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States,” International Security, Spring 2017

Caitlin Talmadge, November/December 2018, "Beijing’s Nuclear Option," Foreign Affairs, https://www.foreignaffairs.com/articles/china/2018-10-15/beijings-nuclear-option

STRAIT SHOOTERS

The most worrisome flash point for a U.S.-Chinese war is Taiwan. Beijing’s long-term objective of reunifying the island with mainland China is clearly in conflict with Washington’s longstanding desire to maintain the status quo in the strait. It is not difficult to imagine how this might lead to war. For example, China could decide that the political or military window for regaining control over the island was closing and launch an attack, using air and naval forces to blockade Taiwanese harbors or bombard the island. Although U.S. law does not require Washington to intervene in such a scenario, the Taiwan Relations Act states that the United States will “consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States.” Were Washington to intervene on Taipei’s behalf, the world’s sole superpower and its rising competitor would find themselves in the first great-power war of the twenty-first century.

In the course of such a war, U.S. conventional military operations would likely threaten, disable, or outright eliminate some Chinese nuclear capabilities—whether doing so was Washington’s stated objective or not. In fact, if the United States engaged in the style of warfare it has practiced over the last 30 years, this outcome would be all but guaranteed.

Consider submarine warfare. China could use its conventionally armed attack submarines to blockade Taiwanese harbors or bomb the island, or to attack U.S. and allied forces in the region. If that happened, the U.S. Navy would almost certainly undertake an antisubmarine campaign, which would likely threaten China’s “boomers,” the four nuclear-armed ballistic missile submarines that form its naval nuclear deterrent. China’s conventionally armed and nuclear-armed submarines share the same shore-based communications system; a U.S. attack on these transmitters would thus not only disrupt the activities of China’s attack submarine force but also cut off its boomers from contact with Beijing, leaving Chinese leaders unsure of the fate of their naval nuclear force. In addition, nuclear ballistic missile submarines depend on attack submarines for protection, just as lumbering bomber aircraft rely on nimble fighter jets. If the United States started sinking Chinese attack submarines, it would be sinking the very force that protects China’s ballistic missile submarines, leaving the latter dramatically more vulnerable.

Even more dangerous, U.S. forces hunting Chinese attack submarines could inadvertently sink a Chinese boomer instead. After all, at least some Chinese attack submarines might be escorting ballistic missile submarines, especially in wartime, when China might flush its boomers from their ports and try to send them within range of the continental United States. Since correctly identifying targets remains one of the trickiest challenges of undersea warfare, a U.S. submarine crew might come within shooting range of a Chinese submarine without being sure of its type, especially in a crowded, noisy environment like the Taiwan Strait. Platitudes about caution are easy in peacetime. In wartime, when Chinese attack submarines might already have launched deadly strikes, the U.S. crew might decide to shoot first and ask questions later.

Adding to China’s sense of vulnerability, the small size of its nuclear-armed submarine force means that just two such incidents would eliminate half of its sea-based deterrent. Meanwhile, any Chinese boomers that escaped this fate would likely be cut off from communication with onshore commanders, left without an escort force, and unable to return to destroyed ports. If that happened, China would essentially have no naval nuclear deterrent.

The situation is similar onshore, where any U.S. military campaign would have to contend with China’s growing land-based conventional ballistic missile force. Much of this force is within range of Taiwan, ready to launch ballistic missiles against the island or at any allies coming to its aid. Once again, U.S. victory would hinge on the ability to degrade this conventional ballistic missile force. And once again, it would be virtually impossible to do so while leaving China’s nuclear ballistic missile force unscathed. Chinese conventional and nuclear ballistic missiles are often attached to the same base headquarters, meaning that they likely share transportation and supply networks, patrol routes, and other supporting infrastructure. It is also possible that they share some command-and-control networks, or that the United States would be unable to distinguish between the conventional and nuclear networks even if they were physically separate.

To add to the challenge, some of China’s ballistic missiles can carry either a conventional or a nuclear warhead, and the two versions are virtually indistinguishable to U.S. aerial surveillance. In a war, targeting the conventional variants would likely mean destroying some nuclear ones in the process. Furthermore, sending manned aircraft to attack Chinese missile launch sites and bases would require at least partial control of the airspace over China, which in turn would require weakening Chinese air defenses. But degrading China’s coastal air defense network in order to fight a conventional war would also leave much of its nuclear force without protection.

Once China was under attack, its leaders might come to fear that even intercontinental ballistic missiles located deep in the country’s interior were vulnerable. For years, observers have pointed to the U.S. military’s failed attempts to locate and destroy Iraqi Scud missiles during the 1990–91 Gulf War as evidence that mobile missiles are virtually impervious to attack. Therefore, the thinking goes, China could retain a nuclear deterrent no matter what harm U.S. forces inflicted on its coastal areas. Yet recent research suggests otherwise. Chinese intercontinental ballistic missiles are larger and less mobile than the Iraqi Scuds were, and they are harder to move without detection. The United States is also likely to have been tracking them much more closely in peacetime. As a result, China is unlikely to view a failed Scud hunt in Iraq nearly 30 years ago as reassurance that its residual nuclear force is safe today, especially during an ongoing, high-intensity conventional war.

China’s vehement criticism of a U.S. regional missile defense system designed to guard against a potential North Korean attack already reflects these latent fears. Beijing’s worry is that this system could help Washington block the handful of missiles China might launch in the aftermath of a U.S. attack on its arsenal. That sort of campaign might seem much more plausible in Beijing’s eyes if a conventional war had already begun to seriously undermine other parts of China’s nuclear deterrent. It does not help that China’s real-time awareness of the state of its forces would probably be limited, since blinding the adversary is a standard part of the U.S. military playbook.

Put simply, the favored U.S. strategy to ensure a conventional victory would likely endanger much of China’s nuclear arsenal in the process, at sea and on land. Whether the United States actually intended to target all of China’s nuclear weapons would be incidental. All that would matter is that Chinese leaders would consider them threatened.

LESSONS FROM THE PAST

At that point, the question becomes, How will China react? Will it practice restraint and uphold the “no first use” pledge once its nuclear forces appear to be under attack? Or will it use those weapons while it still can, gambling that limited escalation will either halt the U.S. campaign or intimidate Washington into backing down?

Chinese writings and statements remain deliberately ambiguous on this point. It is unclear which exact set of capabilities China considers part of its core nuclear deterrent and which it considers less crucial. For example, if China already recognizes that its sea-based nuclear deterrent is relatively small and weak, then losing some of its ballistic missile submarines in a war might not prompt any radical discontinuity in its calculus.

The danger lies in wartime developments that could shift China’s assumptions about U.S. intentions. If Beijing interprets the erosion of its sea- and land-based nuclear forces as a deliberate effort to destroy its nuclear deterrent, or perhaps even as a prelude to a nuclear attack, it might see limited nuclear escalation as a way to force an end to the conflict. For example, China could use nuclear weapons to instantaneously destroy the U.S. air bases that posed the biggest threat to its arsenal. It could also launch a nuclear strike with no direct military purpose—on an unpopulated area or at sea—as a way to signal that the United States had crossed a redline.

If such escalation appears far-fetched, China’s history suggests otherwise. In 1969, similar dynamics brought China to the brink of nuclear war with the Soviet Union.

In early March of that year, Chinese troops ambushed Soviet guards amid rising tensions over a disputed border area. Less than two weeks later, the two countries were fighting an undeclared border war with heavy artillery and aircraft. The conflict quickly escalated beyond what Chinese leaders had expected, and before the end of March, Moscow was making thinly veiled nuclear threats to pressure China to back down.

Chinese leaders initially dismissed these warnings, only to radically upgrade their threat assessment once they learned that the Soviets had privately discussed nuclear attack plans with other countries. Moscow never intended to follow through on its nuclear threat, archives would later reveal, but Chinese leaders believed otherwise. On three separate occasions, they were convinced that a Soviet nuclear attack was imminent. Once, when Moscow sent representatives to talks in Beijing, China suspected that the plane transporting the delegation was in fact carrying nuclear weapons. Increasingly fearful, China test-fired a thermonuclear weapon in the Lop Nur desert and put its rudimentary nuclear forces on alert—a dangerous step in itself, as it increased the risk of an unauthorized or accidental launch. Only after numerous preparations for Soviet nuclear attacks that never came did Beijing finally agree to negotiations.

China is a different country today than it was in the time of Mao Zedong, but the 1969 conflict offers important lessons. China started a war in which it believed nuclear weapons would be irrelevant, even though the Soviet arsenal was several orders of magnitude larger than China’s, just as the U.S. arsenal dwarfs China’s today. Once the conventional war did not go as planned, the Chinese reversed their assessment of the possibility of a nuclear attack to a degree bordering on paranoia. Most worrying, China signaled that it was actually considering using its nuclear weapons, even though it had to expect devastating retaliation. Ambiguous wartime information and worst-case thinking led it to take nuclear risks it would have considered unthinkable only months earlier. This pattern could unfold again today.

### 3

#### Threats are constructed – their security discourse creates a self fulfilling prophecy that makes true understanding of structural causes behind “threats” impossible.

**Mack 91:** Dr. Mack, professor at Harvard Medical School, 1991, (John E., “The Psychodynamics of International Relationships” Vol 1 p. 58-59)

Attempts to explore the psychological roots of enmity are frequently met with an argument that, reduced to its essentials , goes something like this: “It’s very well to psychologize but my enemy is real. The Russians (or Germans, Arabs, Israelis, Americans) are armed, threaten us, and intend us harm. Furthermore, there are real struggles between us and them and differing national interests: competition over oil, land or scarce resources and genuine conflicts of values between our two nations (or political systems) It is essential that we be strong and maintain a balance of superiority of (military and political) power, lest the other side take advantage of our weakness.” This argument is neither wrong nor right, but instead simply limited. It fails to grapple with a critical distinction that informs the entire subject. Is the threat really generated by the enemy as it appears to be at any given moment, or is it based on one’s own contribution to the threat, derived from distortion of perception by provocative words and actions in a cycle of enmity and externalization of responsibility? In sum, the enemy IS real, but we have not learned to identify our own role in creating that enemy or in elaborating the threatening image we hold of the other group or country and its actual intentions or purposes. “we never see our enemy’s motives and we never labor to asses his will with anything approaching objectivity.”

#### Securitization of China is a form of American hegemony that attempts to create American identity- they are a police force that sustains itself by doing good under the guise of the ambiguous threat of the evil Others but that’s *why* tense relations happen.

Solomon 15 [Ty Solomon is a prof @ international relations @ UofGlasgow, The Politics of Subjectivity in American Foreign Policy Discourses, pp. 210-211, 1-23-2019 amrita]

These elements of fantasy underpinned the neoconservative attempts at discursive hegemony in the late 1990s. Logics of equivalence and difference function here in much the same way as they have in other neoconservative discourses. Boundaries of the collective subject and its Others are constructed through strings of signifiers that attempt to pin down or represent the subject within discourse, and Others are constructed through strings of differences. The Others against which the subject is defined are constructed through different predications that attempt to express who and what they are and what they share against the US. American forces "deter Chinese aggression against democratic Taiwan" in East Asia, help deter a “possible invasion" of South Korea by the North, and help deter "possible aggression by Saddam Hussein or the fundamentalist regime in Iran” in the Persian Gulf (Kristol and Kagan 1996:20-21). Both “rogue states" such as North Korea and “nuclear intimidation” by the Chinese pose threats to the US mainland (25). China and Iran “entertain ambitions of upsetting the present world order” (26). For Kristol and Kagan, all of these examples illustrate how John Quincy Adams’s warning that the US “ought not go 'abroad in search of monsters to destroy'” is now outdated (31). “But why not?,” the authors ask, questioning Adams (31). "The alternative is to leave monsters on the loose, ravaging and pillaging to their hearts’ content, as Americans stand by and watch” (31). "Aggression,” “invasion,” "fundamentalist,” **"rogue,”** "intimidation,” “upsetting,” even "monsters”—these various names and signifiers constitute not just a series of Others (mainly China, Iran, and Iraq) in Kristol and Kagan's discourse, but all seem to express a common underlying similarity. "Fundamentalists” and "rogues” are almost by definition here “aggressive” and “monsters," enjoying a combination of "ravaging,” "pillaging," "aggression,” and "upsetting.” As they are produced in the discourse, the similarities they share may seem to be some "essence” common to such outlaw states. Yet their unfixed definition is passed along this string of signifiers. When one's definition is interrogated, one must rely on the other signifiers in the chain to fill in the definition. Their meanings, then, both differ and are deferred: they differ to the extent that they are deployable as different signifiers so that one can speak of them as different, yet each of their individual meanings is deferred to the others in the chain. Similarly, logics of equivalence are at work in the construction of the “American" subject. “Moral clarity,” “American exceptionalism,” “moral confidence," “American principles," “American influence,” “patriotic mission," “spirit,” “remoralization,” “honor,” “national greatness,” “heroic,” “elevated patriotism,” “responsibility,” and “moral and political leadership” all attempt to tie together what “America” and the “United States” mean. While each of these signifiers seems to point to a different quality or characteristic of the subject, they also seem to express a certain underlying similarity. Like the construction of difference in the chains constituting America's Others, the signifiers constructing “America” seem to share a quality that cannot be expressed by any of them individually. Their meanings thus differ and are deferred; each of the signifiers differs from the others in one sense, yet their meanings within the text are deferred to other signifiers in the chain constructing the subject “America." Their meanings are blurred to the extent that even though they are viewed as expressing a fundamental "Americanness,” nothing fundamental underlies any of the signifiers or the chain as a whole. The meaning of one is deferred to another without touching an underlying essence of the subject, simply because there is no such essence. The meanings circle around that which underlies the chain, which is simply a place of lack—a void (Laclau 1996:57). Thus, logics of equivalence and difference are at work in the chains constructing both the American subject and America’s threatening Others.Desire itself brings together these chains of identification. Desire for full representation, for a signifier that will represent the split subject in a way that its divisions and ambiguities will be healed, moves from object to object**.** Without lack there is no desire, and without desire there is no subjectivity. Within Kristol and Kagan's discourse, the desire for subjectivity is constructed along the series of equivalences that construct both "America” and the Other(s). The desire for a signifier that will fully represent the subject and that will heal its divisions and erase its ambiguity shifts along the series of signifiers that attempt to represent it. "Moral clarity," "American exceptionalism “moral confidence,” “national greatness,” and so on offer the promise of wholeness as laid out in the fantasy, yet all fail in their promise to heal the subject’s split. Thus, desire is constantly frustrated and constantly shifts to avoid this frustration, just as desire is frustrated in its inevitable encounter with the signifiers of the Other(s). The two chains are mutually constitutive of each other, and desire is frustrated in the lack of representation in "our” chain and by the Other(s) that are perceived to block our representation (yet actually function as the signifying patches that allow the subject some coherence). The complete subject that they imply is nothing other than the retroactive construction of itself that did not exist before it was presumed by the fantasy. The equivalences attempt to touch this "America” that is/was without division, yet the fantasy implicit in these signifiers merely covers over a lack.

#### Their security discourse causes genocide and interventionism in the name of cleansing the world of violent “others”

Friis 2k - Friis, UN Sector at the Norwegian Institute of International Affairs, 2k, (Karsten, Peace and Conflict Studies 7.2, “From Liminars to Others: Securitization Through Myths,” <http://shss.nova.edu/pcs/journalsPDF/V7N2.pdf#page=2>). NS

The problem with societal securitization is one of representation. It is rarely clear in advance who it is that speaks for a community. There is no system of representation as in a state. Since literately anyone can stand up as representatives, there is room for entrepreneurs. It is not surprising if we experience a struggle between different representatives and also their different representations of the society. What they do share, however, is a conviction that they are best at providing (a new) order. If they can do this convincingly, they gain legitimacy. What must be done is to make the uncertain certain and make the unknown an object of knowledge. To present a discernable Other is a way of doing this. The Other is represented as an Other -- as an unified single actor with a similar unquestionable set of core values (i.e. the capital “O”). They are objectified, made into an object of knowledge, by representation of their identity and values. In other words, the representation of the Other is depoliticized in the sense that its inner qualities are treated as given and non-negotiable. In Jef Huysmans (1998:241) words, there is both a need for a mediation of chaos as well as of threat. A mediation of chaos is more basic than a mediation of threat, as it implies making chaos into a meaningful order by a convincing representation of the Self and its surroundings. It is a mediation of “ontological security”, which means “...a strategy of managing the limits of reflexivity ... by fixing social relations into a symbolic and institutional order” (Huysmans 1998:242). As he and others (like Hansen 1998:240) have pointed out, the importance of a threat construction for political identification, is often overstated. The mediation of chaos, of being the provider of order in general, is just as important. This may imply naming an Other but not necessarily as a threat. Such a dichotomization implies a necessity to get rid of all the liminars (what Huysmans calls “strangers”). This is because they “...connote a challenge to categorizing practices through the impossibility of being categorized”, and does not threaten the community, “...but the possibility of ordering itself” (Huysmans 1998:241). They are a challenge to the entrepreneur by their very existence. They confuse the dichotomy of Self and Other and thereby the entrepreneur’s mediation of chaos. As mentioned, a liminar can for instance be people of mixed ethnical ancestry but also representations of competing world-pictures. As Eide (1998:76) notes: “Over and over again we see that the “liberals” within a group undergoing a mobilisation process for group conflict are the first ones to go”. The liminars threaten the ontological order of the entrepreneur by challenging his representation of Self and Other and his mediation of chaos, which ultimately undermines the legitimacy of his policy. The liminars may be securitized by some sort of disciplination, from suppression of cultural symbols to ethnic cleansing and expatriation. This is a threat to the ontological order of the entrepreneur, stemming from inside and thus repoliticizing the inside/outside dichotomy. Therefore the liminar must disappear. It must be made into a Self, as several minority groups throughout the world have experienced, or it must be forced out of the territory. A liminar may also become an Other, as its connection to the Self is cut and their former common culture is renounced and made insignificant. In Anne Norton’s (1988:55) words, “The presence of difference in the ambiguous other leads to its classification as wholly unlike and identifies it unqualifiedly with the archetypal other, denying the resemblance to the self.” Then the liminar is no longer an ontological danger (chaos), but what Huysmans (1998:242) calls a mediation of “daily security”. This is not challenging the order or the system as such but has become a visible, clear-cut Other. In places like Bosnia, this naming and replacement of an Other, has been regarded by the securitizing actors as the solution to the ontological problem they have posed. Securitization was not considered a political move, in the sense that there were any choices. It was a necessity: Securitization was a solution based on a depoliticized ontology.10 This way the world-picture of the securitizing actor is not only a representation but also made into reality. The mythical second-order language is made into first-order language, and its “innocent” reality is forced upon the world. To the entrepreneurs and other actors involved it has become a “natural” necessity with a need to make order, even if it implies making the world match the map. Maybe that is why war against liminars are so often total; it attempts a total expatriation or a total “solution” (like the Holocaust) and not only a victory on the battlefield. If the enemy is not even considered a legitimate Other, the door may be more open to a kind of violence that is way beyond any war conventions, any jus in bello. This way, securitizing is legitimized: The entrepreneur has succeeded both in launching his world-view and in prescribing the necessary measures taken against it. This is possible by using the myths, by speaking on behalf of the natural and eternal, where truth is never questioned.

#### The alternative is to reject securitization – this opens up space for emancipatory political engagement.

**Neocleous:** [Mark, Professor of the Critique of Political Economy; Head of Department of Politics & History Brunel Univ, Critique of Security, 185-6]

The only way out of such a dilemma, to escape the fetish, is perhaps to eschew the logic of securityaltogether **-** to reject it as so ideologically loaded in favour of the state that any real political thought other than the authoritarian and reactionary should be pressed to give it up. That is clearly something that can not be achieved within the limits of bourgeois thought and thus could never even begin to be imagined by the security intellectual. It is also something that the constant iteration of the refrain 'this is an insecure world'and reiteration of one fear**,** anxiety and insecurity after **another** will also make it hard to do**.** But it is something that the critique of security suggests we may have to consider if we want a political way out of the impasse of security. This impasse exists because security has now become so all-encompassing that it marginalises all else, most notably the constructive conflicts, debates and discussions that animate political life. The constant prioritising of a mythical security as a political end - as the political end constitutes a rejection of politics in any meaningful sense of the term. That is, as a mode of action in which differences can be articulated, in which the conflicts and struggles **t**hat arise from such differences can be fought for and negotiated, in which people might come to believe that another world is possible - that they might transform the world and in turn be transformed. Security politics simply removes this; worse, it remoeves it while purportedly addressing it. In so doing it suppresses all issues of power and turns political questions into debates about the most efficient way to achieve 'security', despite the fact that we are never quite told - never could be told - what might count as having achieved it. Security politics is, in this sense, an anti-politics,"' dominating political discourse in much the same manner as the security state tries to dominate human beings, reinforcing security fetishism and the monopolistic character ofsecurity on the political imagination. We therefore need to get beyond security politics, not add yet more 'sectors' to it in a way that simply expands the scope of the state and legitimises state intervention in yet more and more areas of our lives. Simon Dalby reports a personal communication with Michael Williams, co-editor of the important text Critical Security Studies, in which the latter asks: if you take away security, what do you put in the hole that's left behind? But I'm inclined to agree with Dalby: maybe there is no hole**."**' The mistake has been to think that there is a hole and that this hole needs to be filled with a new vision or revision of security in which it is re-mapped or civilised or gendered or humanised or expanded or whatever. All of these ultimately remain within the statist political imaginary, and consequently end up reaffirming the state as the terrain of modern politics, the grounds of security. The real task is not to fill the supposed hole with yet another vision of security, but to fight for an alternative political language which takes us beyond the narrow horizon of bourgeois security and which therefore does not constantly throw us into the arms of the state. That's the point of critical politics: to develop a new political language more adequate to the kind of society we want. Thus while much of what I have said here has been of a negative order, part of the tradition of critical theory is that the negative may be as significant as the positive in setting thought on new paths. For if security really is the supreme concept of bourgeois society and the fundamental thematic of liberalism, then to keep harping on about insecurity and to keep demanding 'more security' (while meekly hoping that this increased security doesn't damage our liberty) is to blind ourselves to the possibility of building real alternatives to the authoritarian tendencies in contemporary politics. To situate ourselves against security politics would allow us to circumvent the debilitating effect achieved through the constant securitising of social and political issues, debilitating in the sense that 'security' helps consolidate the power of the existing forms of social domination and justifies the short-circuiting of even the most democratic forms. It would also allow us to forge another kind of politics centred on a different conception of the good. We need a new way of thinking and talking about social being and politics that moves us beyond security. This would perhaps be emancipatory in the true sense of the word.What this might mean**,** precisely, must be open to debate. But it certainly requires recognising that security is an illusion that has forgotten it is an illusion; it requires recognising that security is not the same as solidarity; it requires accepting that insecurity is part of the human condition, and thus giving up the search for the certainty of security and instead learning to tolerate the uncertainties, ambiguities and 'insecurities' that come with being human; it requires accepting that 'securitizing' an issue does not mean dealing with it politically, but bracketing it out and handing it to the state;it requires us to be brave enough to return the gift."'

#### Representations must precede policy discussion – they determine what is politically thinkable.

Crawford 02 — Neta, PhD MA MIT, BA Brown, Prof. of poli sci at boston univ. Argument and Change in World Politics, p. 19-21

Coherent arguments are unlikely to take place unless and until actors, at least on some level, agree on what they are arguing about. The at least temporary resolution of meta-arguments- regarding the nature of the good (the content of prescriptive norms); what is out there, the way we know the world, how we decide between competing beliefs (ontology and epistemology); and the nature of the situation at hand( the proper frame or representation)- must occur before specific arguments that could lead to decision and action may take place. Meta-arguments over epistemology and ontology, relatively rare, occur in instances where there is a fundamental clash between belief systems and not simply a debate within a belief system. Such arguments over the nature of the world and how we come to know it are particularly rare in politics though they are more frequent in religion and science. Meta-arguments over the “good” are contests over what it is good and right to do, and even how we know the good and the right. They are about the nature of the good, specifically, defining the qualities of “good” so that we know good when we see it and do it. Ethical arguments are about how to do good in a particular situation. More common are meta-arguments over representations or frames- about how we out to understand a particular situation. Sometimes actors agree on how they see a situation. More often there are different possible interpretations. Thomas Homer-Dixon and Roger karapin suggest, “Argument and debate occur when people try to gain acceptance for their interpretation of the world”. For example, “is the war defensive or aggressive?”. Defining and controlling representations and images, or the frame, affects whether one thinks there is an issue at stake and whether a particular argument applies to the case. An actor fighting a defensive war is within international law; an aggressor may legitimately be subject to sanctions. Framing and reframing involve mimesis or putting forward representations of what is going on. In mimetic meta-arguments, actors who are struggling to characterize or frame the situation accomplish their ends by drawing vivid pictures of the “reality” through exaggeration, analogy, or differentiation. Representations of a situation do not re-produce accurately so much as they creatively re-present situations in a way that makes sense. “mimesis is a metaphoric or ‘iconic argumentation of the real.’ Imitating not the effectivity of events but their logical structure and meaning.” Certain features are emphasized and others de-emphasized or completely ignored as their situation is recharacterized or reframed. Representation thus becomes a “constraint on reasoning in that it limits understanding to a specific organization of conceptual knowledge.” The dominant representation delimits which arguments will be considered legitimate, framing how actors see possibities. As Roxanne Doty argues, “the possibility of practices presupposes the ability of an agent to imagine certain courses of action. Certain background meanings, kinds of social actors and relationships, must already be in place.” If, as Donald Sylvan and Stuart Thorson argue, “politics involves the selective privileging of representations, “it may not matter whether one representation or another is true or not. Emphasizing whether frames articulate accurate or inaccurate perceptions misses the rhetorical importof representation- how frames affect what is seen or not seen, and subsequent choices. Meta-arguments over representation are thus crucial elements of political argument because an actor’s arguments about what to do will be more persuasive if their characterization or framing of the situation holds sway. But, as Rodger Payne suggests, “No frame is an omnipotent persuasive tool that can be decisively wielded by norm entrepreneurs without serious political wrangling.” Hence framing is a meta-argument.

### 4

#### China views resources in space as key to foreign policy iniatives

Blair, Yali, 19, 03/2019, “The Space Security Dilemma”, Bruce G. Blair is the President of the World Security Institute. He was a project director at the Congressional Office of Technology Assessment and a senior fellow in the Foreign Policy Studies Program at the Brookings Institution from 1987-2000. Mr. Blair is the author of numerous articles and books on security issues including the Logic of Accidental Nuclear War and Global Zero Alert for Nuclear Forces. He is presently completing a new book on U.S. nuclear policy.sChen Yali is the editor-in-chief of Washington Observer. She is also a Program Manager of Chen Shi China Research Group based in Beijing. Chen worked for China Daily as a reporter and opinion writer on politics and international affairs between 1994 and 2000, URL: <https://www.globalzero.org/wp-content/uploads/2019/03/BB_Editors-Notes-Space-Security-Dilemma_2006.pdf>, KR

A zero-sum mindset toward space is hardening in China as a result of this apprehension, as amply illustrated in the public media. Space is eyed in China as an area of resources and possibilities to be acquired before it’s too late. ShuXing, whose book is reviewed later in this journal, likens the grabbing of satellite orbits to the “Enclosure Movement” in late 18th Century England in which the more capability one has, the more resources one can seize. Another reviewed author argued that countries scramble into space to fight for the tremendous resources found there and “once this fight for resources causes irreconcilable conflicts, it may lead to radical space confrontations.” A space war seems to many Chinese to be another form of resource war. Such urgency in seeking control over resources is not unique to space, but also applies to energy and other areas. Given China’s population and rapid economic growth, controlling resources is understandably a paramount concern. Regarding space, however, a zero-sum (‘win-lose’) attitude is narrow-minded and misguided. If feverish competition for resources in space causes Sino-American relations to deteriorate or leads to the outbreak of war between them, then both parties lose.

Maj. Gen. Chang Xianqi and Sui Junqin of the PLA Institute of Command and Technology (aka. Armament Command and Technology Academy) offer a straightforward description of the aims of China’s space activities over the next five to 20 years, and explain why perceptions or accusations of hidden military aims in China’s manned space flight program (which sent two astronauts into space in October 2005) do not withstand logical scrutiny. They characterize the country’s space mission as dedicated to advancing science and to supporting China’s economic modernization. They dismiss two key allegations concerning the manned space program that the Shenzhou spacecraft’s ability for mid-course orbital maneuvering indicates a Chinese military effort to apply the technology to Chinese strategic missiles in order to give these missiles the ability to avoid U.S. missile defenses, and that China envisions its manned spacecraft as platforms for conducting real-time reconnaissance and intelligence collection for military ends. China’s orbital maneuver technology, they note, is decades old and evolved independently of the U.S. missile defense program, while the inefficiencies of conducting surveillance from manned platforms compared to satellites are widely appreciated and have led other space-faring nations to choose satellites for this mission.

#### The plan forces China to respond since they can’t pursue resources – that form of militarization creates arms control and escalation crises

Blair, Yali, 19, 03/2019, “The Space Security Dilemma”, Bruce G. Blair is the President of the World Security Institute. He was a project director at the Congressional Office of Technology Assessment and a senior fellow in the Foreign Policy Studies Program at the Brookings Institution from 1987-2000. Mr. Blair is the author of numerous articles and books on security issues including the Logic of Accidental Nuclear War and Global Zero Alert for Nuclear Forces. He is presently completing a new book on U.S. nuclear policy.sChen Yali is the editor-in-chief of Washington Observer. She is also a Program Manager of Chen Shi China Research Group based in Beijing. Chen worked for China Daily as a reporter and opinion writer on politics and international affairs between 1994 and 2000, URL: <https://www.globalzero.org/wp-content/uploads/2019/03/BB_Editors-Notes-Space-Security-Dilemma_2006.pdf>, KR

While the China space threat consists of a spectrum of possibilities, the U.S. space threat to China clearly goes beyond the realm of possibilities, Zhang Hui at Harvard University contends in his article that examines threats from a Chinese perspective. Drawing on authoritative sources, he argues that the United States is unambiguously committed not only to exploiting space for military purposes, but also to controlling space by all necessary means including weapons deployed in space. The objective is not only to protect U.S. space assets, but to deny adversaries the use of space in wartime. In its most ambitious rendition, controlling space applies even to the transitory period of several minutes when an adversary’s missiles are passing through space enroute to their wartime targets on enemy soil. This prospective role for U.S. space control weapons – shooting down an adversary’s ballistic missiles – is the central concern of Zhang’s analysis, as it represents the most serious threat to China’s security. A space-based U.S. missile defense system, especially one designed to shoot down ballistic missiles during their several minutes of boosted flight after launch (boost-phase defenses), would pose the gravest potential threat by enabling the United States to neutralize China’s strategic nuclear missile deterrent.

In some respects Zhang and many U.S. analysts understate the degree of potential threat to China by stressing the huge cost of the thousands of space- based interceptors needed to maintain an around-the-clock vigil of Chinese missile launches, and by stressing the relative ease by which China’s missiles could punch holes in this defensive constellation. The understatement derives from the fact that a far less extensive galaxy of U.S. space-based interceptors would be needed if the United States could choose the moment for initiating hostilities as part of a preemptive offensive strategy. Even a constellation of dozens of interceptors could be decisive if the United States enjoyed the luxury of setting the terms of the onset of conflict and the interceptors were optimally positioned at that moment.

In Zhang’s view, China could counter by deploying anti-space weapons designed to cripple the U.S. missile defense network, but such a step could ignite an arms race in space (and, we might add, create impulses to preemptively strike in space during a crisis). Alternatively, China could ramp up its arsenal of nuclear missiles and warheads to the point at which it would overwhelm the U.S. defense capability, but the downsides are numerous. A Chinese missile build-up could trigger nuclear reactions from India. If Pakistan follows suit, an arms race in South Asia could result. It could also require China to re-start its fissile materials production facilities and thereby unravel China’s commitment to the multinational treaty calling for all countries to stop future production of such materials.

#### Turns aff war impacts and hyper-escalate their conflict scenarios since other states have incentives to match China

## Case

### Case - Toplevel

#### 1] No solvency for the aff – nothing about why they are able to prevent militarization or anything like that

#### 2] They lose on presumption – multiple warrants:

#### A] The affirmative must defend private appropriation but their evidence is all about the public sector – it’s about things like the military which is owned by the government and means no impact – means that they lose on presumption bc none of it is about appropriation

#### B] Nothing about why mining is appropriation – they do not say that China lays claims to asteroids or anything similar so no appropriation

#### C] Ultimate TKO – their own evidence says that the government runs all space programs – there’s no coming back from this oops bc it means they arent about private appropriation and can’t solve – we read blue

1AC Nie 20 (Mingyan, faculty of law @ Nanjing University of Aeronautics and Astronautics, 5-1-2020, "Space Privatization in China's National Strategy of Military-Civilian Integration: An Appraisal of Critical Legal Challenges," ADS, https://ui.adsabs.harvard.edu/abs/2020SpPol.5201372N/abstract) AG

2. Space privatization as a significant factor in China's implementation of its MCI strategy

The US Congressional Office of Technology Assessment defines MCI as follows: “cooperation between government and commercial facilities in research and development, manufacturing, and/or mainte- nance operations; combined production of similar military and commercial items, including components and subsystems, side by side on a single firm or facility, and use of commercial off-the-shelf items directly within military systems [[4], p. 2].” This definition is consistent with the Chinese government's definition of the MCI strategy, that is, “to apply military technologies in the civil field, additionally, to pro- mote civil technologies to help with the defense industry [5].”

The idea to develop the defense industry and economy as a coordinated system is not a new idea for the Chinese government. In Mao Zedong's era, the concept of connecting military and civilian development was proposed and promoted. Subsequent leaders such as Deng Xiaoping, Jiang Zemin, and Hu Jintao have also proposed this idea [[2], pp. 69e70]. However, this objective has not been achieved [6] because the policies proposed ensured the codevelopment of the military and private sector but did not establish a specialized department and stable regulations [[7], p. 34]. Soon after announcing the “2016 Opinions,” the Central Commission of MCI Development, chaired by President Xi Jinping, was established as the highest decision-making body for issues related to MCI.2 Moreover, a series of documents that administrate the implementation of the MCI strategy were formulated as part of the Central Commission framework,3 and the creation and coordination of regulations were proposed.4 Thus, based on the establishment of a comprehensive framework for the administration and regulations of the MCI national strategy, additional results are now expected.

China's space industry has the typical full range of capacities of developed space sectors [[8], p. 86]. Approximately 20 years ago, China began to use its space systems, such as satellites and ground stations, in military and civilian areas.5 Chinese space programs are strictly controlled by government departments and conducted by relevant government-owned companies, without distinguishing military or civilian use.6 Thus, private enterprises have had no opportunity to engage in space or space-related activities,7 even when military-related space technologies are transferred to the civilian field. In addition, no civilian space technologies have been converted to military use.

As early as 1997, for the first time, private-sector space revenues exceeded government space expenditures, and the private sector's share of global space activities gradually increased [[14], pp. 215e216]. Space privatization has been acknowledged as a necessity by many space powers. However, as described, China provided no opportunities for private enterprises to become involved in space activities.

In the context of promoting the MCI as a national strategy, policymakers have realized that a crucial step to achieve the MCI targets in space is to facilitate the participation of the nongovernmental sector. According to analysts, the first stage of China's MCI strategy will prioritize the application of military technologies in the civilian field, in which the nongovernmental sector should play a vital role. This proposal would provide opportunities to promote the rapid growth of private space enterprises. Once the strength of the private sector increases, it can help the military industry to realize the real MCI target.8

The final target that should be achieved by the MCI strategy in space is to maintain balanced development between the military and civilian fields. To support nongovernmental entities' involvement in space affairs, the latest version of Chinese space policy, “China's Space Activities9” (the “White Paper”), was published at the end of 2016 and encouraged nongovernmental capital and other social sectors to participate in space-related activities; in addition, the government intends to increase its cooperation with private investors [17].

#### D] The companies they reference are state-owned companies

Liu et al 19 (Irina, Evan Linck, Bhavya Lal, Keith W. Crane, Xueying Han, Thomas J. Colvin, IDA Science and Technology Policy Institute) Evaluation of China’s Commercial Space Sector, Institute for Defense Analysis Science & Technology Institute <https://www.ida.org/-/media/feature/publications/e/ev/evaluation-of-chinas-commercial-space-sector/d-10873.ashx> EE

To date, nearly all of China’s accomplishments in space have been achieved by the Chinese government, state-owned enterprises (SOE), or their subsidiaries and suppliers. Historically, China’s space industry has predominantly consisted of SOEs controlled by China’s central or provincial governments. Since 1999, two SOEs, the China Aerospace Science and Technology Corporation (CASC, 中国航天科技集团) and the China Aerospace Science & Industry Corporation (CASIC, 中国航天科工集团),2 have had a near duopoly on launch and space technology in China, with CASC serving as the primary SOE responsible for launch and space technologies.3

#### E] Another TKO - their evidence says China govt runs the companies – we read blue

Patel 21 (Neel V., space and tech journalist, 1-21-2021, "China’s surging private space industry is out to challenge the US," MIT Technology Review, https://www.technologyreview.com/2021/01/21/1016513/china-private-commercial-space-industry-dominance/) AG

China’s space program might have been slowed by the pandemic in 2020, but it certainly didn’t stop. The year’s highlights included sending a rover to Mars, bringing moon rocks back to Earth, and testing out the next-generation crewed vehicle that should take taikonauts into orbit—and possibly to the moon—one day. But there were a few achievements the rest of the world might not have noticed. One was the November 7 launch of Ceres-1, a new type of rocket that, at just 62 feet in height, is capable of taking 770 pounds of payload into low Earth orbit. The launch sent the Tianqi 11 communications satellite into space. At first glance, the Ceres-1 launch might seem unremarkable. Ceres-1, however, wasn’t built and launched by China’s national program. It was a commercial rocket—only the second from a Chinese company ever to go into space. And the launch happened less than three years after the company was founded. The achievement is a milestone for China’s fledgling—but rapidly growing—private space industry, an increasingly critical part of the country’s quest to dethrone the US as the world’s preeminent space power. The rivalry between the US and China, whose space program has surged over the last two decades, is what most people mean when they refer to the 21st-century's space race. China is set to build a new space station later this year and will likely attempt to send its taikonauts to the moon before the decade ends. But these big-picture projects represent just one aspect of the country’s space ambitions. Increasingly, the focus is now on the commercial space industry as well. The nation's growing private space business is less focused on bringing prestige and glory to the nation and more concerned with reducing the cost of spaceflight, increasing its international influence—and making money. “The state is really great at large, ambitious projects like going to the moon or developing a large reconnaissance satellite,” says Lincoln Hines, a Cornell University researcher who focuses on Chinese foreign policy. “But it’s not responsive to meeting market needs”—one big way to encourage rapid technological growth and innovation. “I think the government thinks its commercial space sector can be complementary to the state,” he says. What are the market needs that Hines is referring to? Satellites, and rockets that can launch them into orbit. The space industry is undergoing a renaissance thanks to two big trends spurred by the commercial industry: we can make satellites for less money by making them smaller and using off-the-shelf hardware; and we can also make rockets for less money, by using less costly materials or reusing boosters after they’ve already flown (which SpaceX pioneered with its Falcon 9). These trends mean it is now cheaper to send stuff into space, and the services and data that satellites can offer have come down in price accordingly. China has seen an opportunity. A 2017 report by Bank of America Merrill Lynch estimates that the space industry could be worth up to $2.7 trillion by 2030. Setting foot on the moon and establishing a lunar colony might be a statement of national power, but securing a share of such a highly lucrative business is perhaps even more important to the country’s future. “In the future, there will be tens of thousands of satellites waiting to launch, which is a major opportunity for Galactic Energy” says Wu Yue, a company spokesperson. The problem is, China has to make up decades’ worth of ground lost to the West. How did China get here—and why? 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. Other challenges None of these new companies are yet profitable, and it will be quite some time before they are. “There isn’t any sign of indication that this industry will flop,” says Hines. “But many experts do think a lot of these companies will go out of business.” Apart from the challenge of attracting customers outside China, many companies are still trying to figure out who exactly their customers ought to be. American companies like SpaceX and Blue Origin had billionaire founders ready to burn cash to take on large risks, push past big failures, and finally get off the ground. And while a Chinese billionaire entered the industry last year, “there is no Chinese Elon Musk to push these riskier ventures forward,” says Hines. It’s also unclear whether Chinese companies, even those supported by wealthy backers, will have that appetite for risk. Zheng says one thing Spacety has offered is exceptional transparency with clients for whom it is developing satellites—something that’s still uncommon for Chinese firms. “Many of them have no kind of spaceflight experience,” he says. “They want to see and learn what goes on, but the large companies won’t allow for that. We’re different.” Lastly, China needs to figure out a legal framework that can guide the commercial industry in more explicit terms, and specify what’s allowed and what is not. It is the only major space power without a specialized space law. (The American version is Title 51 of the United States Code.) While the hope is that free enterprise can generate innovation, national governments are still liable for whatever space activities a country’s private companies conduct. There’s a need to license and approve these missions, ensuring that governments know what they’ve signed up for.

### MCF

#### 1] Empirically denied – hosts of situations in which it could have escalated – trde war etc all prove no US-China war

#### 2] Empirically denied – Chinese SCS advancement and naval dominance has been going on for decades – no reason now is a specifically key and will spark war

#### 3] Empirically denied – no distinction in the mi litary and civil industry rn – their evidence concedes it’s all government based – that’s the presumption stuff

#### 4] Empirically denied – tech stealing happens all the time and China has def stolen tech before – no reason it escalates.

#### 5] No solvency – the plan doesn’t get rid of most Chinese innovation

Liu et al 19 (Irina, Evan Linck, Bhavya Lal, Keith W. Crane, Xueying Han, Thomas J. Colvin, IDA Science and Technology Policy Institute) Evaluation of China’s Commercial Space Sector, Institute for Defense Analysis Science & Technology Institute <https://www.ida.org/-/media/feature/publications/e/ev/evaluation-of-chinas-commercial-space-sector/d-10873.ashx> EE

1. Definition of a Commercial Company

Prior to examining the commercial space industry, we first define what companies we include in our evaluation, as the boundary of what includes a commercial company in China varies depending on whom is asked. For example, many SOEs conduct commercial activities with the private sector, buying and selling goods and services from and to households and businesses. However, many of these SOEs prioritize state goals over profitability and do not face traditional market pressures (e.g., they may receive funding from the state to offset losses if costs exceed revenues). In China, therefore, a commercial company is an enterprise that has a primary goal of pursuing profits, rather than meeting government policy goals.

Notably, this definition of commercial differs from the conception of commercial in the United States. The 2010 National Space Policy defined the term commercial as:

space goods, services, or activities provided by private sector enterprises that bear a reasonable portion of the investment risk and responsibility for the activity, operate in accordance with typical market-based incentives for controlling cost and optimizing return on investment, and have the legal capacity to offer these goods or services to existing or potential nongovernmental customers.

Commercialization, under a U.S. perspective, has two dimensions:

1. risk-taking, especially financial, by entities other than the government. Generally, for a company’s activities to be considered commercial, at least some private capital must be at risk or the company must sell to the private sector.

2. the breadth of the customer base, which includes both governmental and nongovernmental customers

Although the above definition fits well with companies in the United States and Europe, ownership in China can be complex (Szamosszegi and Kyle 2011). For example, a majority state-owned company may sell services to households and businesses commercially and have some private investors. Many of the Chinese experts with whom we spoke would consider such a company to be commercial, despite being backed by the state, provided its primary purpose was to sell commercially in pursuit of profits.

Alternatively, a company that is mostly privately-held that has some investment from provincial or municipal VC firms or from the Chinese Academy of Sciences (CAS) and sells solely to the government would also be considered commercial. As such, we use a different framework than one used in the United States for defining “commercial,” as we believe it is more appropriate. Although both these hypothetical companies would be considered commercial, they would be referred to differently in Chinese. Companies that are more privately-held are referred to as 民营企业 (mínyíng qǐyè), meaning a company operated by a civil entity. Companies that are majority-owned by the state fall under the label 国有企业 (guóyǒu qǐyè), meaning state-owned enterprise.

Interviews and a literature review revealed that Chinese nationals do not consider all SOEs that offer commercial services as commercial companies. This distinction was manifested in literature and news reports on China’s commercial space industry, as authors often differentiate between commercial space (商业航天, shāngyè hángtiān) and space commercialization (航天商业化, hángtiān shāngyèhuà), with the latter referring to government-focused SOEs selling their space products and services in commercial markets 4 and the former referring to both commercially-focused state-owned companies and privately-held companies selling to commercial markets.

As ownership does not necessarily determine how a Chinese space company operates, for the purposes of this report we define a commercial company in China as an enterprise that is primarily operated in pursuit of profit, as opposed to an organization that conducts commercial activities primarily to meet public policy goals, which is characteristic of SOEs. Notably, this definition can include companies that are fully state-owned. We make a distinction between state-owned enterprises, which pursue the goals of the state, and state-owned companies, which pursue profits, rather than public policy goals, even though their shares are owned by state entities.

In classifying a company as commercial, we evaluated each company on the basis of three questions (the third question departs from the definition above):

• Does the company have some private parties taking risk (through ownership, investment or other means), even if the majority shareholder is an SOE? 4

• If not, do they sell their products to customers other than the Chinese government, in domestic or foreign markets?

• Even when they are fully or partially state-owned, do they appear to demonstrate independence from their parent SOE or government agency?

These questions are meant to identify companies that have some separation from the Chinese government that could play a role in the global space market. Although we use an inclusive definition for what constitutes a commercial company, we do break these companies into three categories: state-owned, mixed-ownership, and privately-held, as ownership can affect other attributes of their businesses.

a. State-owned

Most SOEs are owned and controlled by the State-owned Assets and Supervision and Administration Commission (SASAC) of the State Council or similar commissions organized by provincial, municipal, or county governments. SOEs in turn may fully or partially own subsidiaries. Partially owned SOE subsidiaries may be joint ventures with domestic or foreign private sector groups, funded by public or private VC, or publicly traded. As the goal of this report is to examine China’s commercial space sector, we do not examine SOEs or their large subsidiaries that do not focus on making profits. They include CASC or its major subsidiaries such as the China Academy of Launch Vehicle Technology 4 This assumes that private owners always have a profit perspective, which may not always be the case for all private companies. An example is Blue Origin in the United States, which, until recently, had operated more as a philanthropically-driven technology development company rather than a profit-driven commercial one. 5 (CALT), Shanghai Academy of Spaceflight Technology (SAST), or the China Great Wall Industry Corporation (CGWIC) that sells CASC’s products and services, including those of the China Academy of Space Technology (CAST). In our statistics, we include some fully state-owned companies, such as Expace, as these companies are primarily focused on making profits and show some independence from their parent SOE.

b. Mixed-ownership

A number of the commercial space companies we identified have a mix of public and private ownership. This does not mean that the government dictates how these companies operate or what they do. We find mixed-ownership companies fall into three categories.

• The first group is SOE-backed companies that have large percentages of private ownership, such as APT Satellite. These companies demonstrate a large degree of independence from their parent SOE, but may rely on it for certain services (e.g., satellite manufacturing).

• The second group of mixed-ownership space companies are spin-offs from CAS institutes and universities, such as Chang Guang Satellite. Spin-offs from CAS often give CAS a minority stake, in exchange for in-kind subsidies, such as use of CAS facilities or researchers. The remainder of the shares is divided among the founder, members of the board, some employees, and public and private VC firms.

• The third group of mixed-ownership companies are otherwise privately-held companies that have received some investment from a provincial or municipal VC firm. Provincial and municipal governments offer this investment to attract high technology businesses and jobs to their areas. Beyond influencing where a business locates itself, this investment does not appear to affect business decisions.

c. Privately-held Non-state-owned space companies we identified can be divided into four (somewhat overlapping) categories.

• Perhaps most important for this report are China’s space start-ups, which are much like the start-up space companies elsewhere in the world. In general, these companies have existed since 2014 and have business plans similar to those of other New Space companies in the West. The largest of these companies have over $100 million in VC funding and several hundred employees; the smallest are still PowerPoint companies with little funding and few employees, but big goals. 6

• The second group of companies are small, privately-held companies that have had time to become established. Many of these companies were founded to act as component suppliers to SOEs. Today, they still supply SOEs but may also supply other private companies.

• The third group of companies are older, more established companies that initially supplied SOEs, but are publicly traded (e.g., Zhuhai Orbita). Several of these companies have pivoted in recent years to owning and operating their own satellites. • The last group of companies include large, publicly traded non-space companies that have acquired small space companies or expanded into space markets (e.g., Tatwah Smartech).

### Asteroids

#### 1] This whole advantage flows neg – there is nothing in their evidence about why China specifically is going to shut out other companies in other states from mining if mining is assumed to be possible which means squo just solves – their evidence is about china hogging minerals on earth, not asteroid minerals – this is the definition of securitization – they just assume China is the evil overlord that is trying to mess up the world and means low risk of impact

#### 2] Asteroid mining isn’t possible – lack of tech thumps and means impact inevitable

Scoles 17

(Sarah Scoles, space writer for Wired. “ASTEROID MINING SOUNDS HARD, RIGHT? YOU DON’T KNOW THE HALF OF IT”, <https://www.wired.com/2017/01/asteroid-mining-sounds-hard-right-dont-know-half/>, SRatakonda)

The biggest hurdle facing any hopeful space mining company is that we don't have the ability to refine precious metals and rare minerals in a microgravity environment. Every asteroid mining plan in the past has come with a huge caveat: we don't have the technology. This may not seem like a huge hurdle - especially considering the amazing feats of human ingenuity in space technology over the past six decades - for investors who actually want to see a return on their investment, it's probably a deal breaker. Perhaps it's not desirable to refine asteroids in situ - might it make sense to capture asteroids in Earth orbit and use them as a near-Earth smorgasbord of resources, cutting off chunks as needed? In this case, I'm highly skeptical that there would be any international agreement about steering potential city-killer asteroids near Earth. That's one Planetary Health and Safety meeting I'd love to sit in on. PHOTOS: Asteroids and Near-Earth Objects Also, Planetary Resources specifically single out near-Earth asteroids (NEAs) as their target. "Of the approximately 9,000 known NEAs, there are more than 1,500 that are energetically as easy to reach as the Moon," says the press release. This may be true, but NEAs don't hang around. They orbit the sun just like the Earth. So is the plan to jump on board, set up a mining platform and then watch billions of dollars of equipment zoom off into deep space until it comes back a year (or ten, or a hundred years) in the future? Or are we going to slow the small NEAs sufficiently so they can be parked in Earth orbit? Once again, messing with an asteroid's trajectory is a huge technological unknown. During the announcement, Diamandis kept referring to "risk tolerant investors" investing their "smart money" in the biggest opportunity ever. He also emphasized that Planetary Resources' goals would enrich humanity as a whole and that their goals were in alignment with NASA's aims to push humanity into space. Bold words for sure, but, again, there are problems with this vision. Countering the "Gee Whiz" factor, as my cohort and business/space analyst Greg Fish would put it, there's a thick forest of formidable red tape an asteroid mining company would have to wade through. ANALYSIS: Asteroid Forensics May Point to Alien Space Miners For starters, mining and refining materials on Earth is a costly and risky endeavor. Can you imagine trying to insure an extraterrestrial mining outfit? If the refinery is totally automated, at least you don't have to worry about workers' benefits, health and safety. But humanity would need to have mastered our solar system to an incredible degree to assure the safety of in-space assets. Losing a multi-billion dollar robotic mining operation wouldn't look so good at the end of the next quarter's budget report. But the biggest selling point for asteroid mining is, of course, all the gazillions of dollars we stand to make from sucking precious metals like platinum from asteroids. As Diamandis kept emphasizing, by exploiting the solar system we would enrich the entire planet with huge wealth. How a profit-making industry became a world-wide charity, I'm not too sure. Last time I checked, BP wasn't busy enriching the world with the profits from their oil drilling. And, as Fish has pointed out countless times, flooding the world's economy with much-fabled trillions of dollars-worth of "cheap" platinum and other rare minerals could kill global markets. On the basis of supply and demand, the price of platinum group metals could collapse as supply routes from asteroids become common. However, to set up and maintain an asteroid mining industry, it would be unimaginatively expensive - perhaps the price of asteroid material would be naturally high due to the sheer risk and overheads required. In short, we have no idea about how an influx of asteroid resources could impact the world. But to say it would benefit mankind as a whole? That's as speculative as predicting the world's economy in 50 years time. ANALYSIS: Capturing Lazy Asteroids to Plunder In short, the only thing that seems unique about today's announcement is that a group of very well respected and smart entrepreneurs and billionaires have clubbed together and thought asteroid mining seemed cool. Sadly, the plan is deliberately vague (who knows how many technological iterative steps are needed before a sustainable mining operation can begin anyway?), there is no realistic timescale and as far as I can tell, there's been only limited analysis as to how much investment will be needed. Regardless of how "risk tolerant" Google's investment may be, the corporation certainly isn't stupid with their investments. Seed money may be very forthcoming in the early stages (and that's all that may be needed if Planetary Resources turns rapidly into a profit making space technology company), but in the long term, hinging this enterprise on making vast wads of imaginary cash from mining asteroids will leave any investor looking for a way out. While I'm personally very excited to hear about any enterprise that can drive innovation in space and invigorate private investment into building a sustainable space infrastructure, I don't believe that getting all hot and heavy over mining asteroids is the way to do it. Although I hope asteroid mining is an industry of the future, we'll have to wait some time before it becomes a realistic proposition. Setting unachievable goals for an undefined future - regardless of the amazing technological advances this will inevitably generate - leaves the plan open to criticism and ultimately rapid loss of interest. I think I'll wait until one of the big oil companies starts to launch rockets before I go getting too excited about yet another plan to pillage asteroids. Image: The double asteroid 90 Antiope - what riches are inside? Credit: ESO, edit by Ian O'Neill The opinions expressed here do not necessarily represent the official views of Discovery Communications.

#### 3] No mining – too hard to extract resources

Corkern 17 - Extension Associate/Laboratory Analyst

Jeffrey Corkern, “Why Asteroid Mining Will Never Happen”, Futurism, https://vocal.media/futurism/why-asteroid-mining-will-never-happen

It’s amazing how people, even smart people, can be trapped by the past. Take the acquisition of metal, for example. For all of its existence, two hundred thousand years, the human race has known only one general way to get metal. Having single humans go wandering around beating on rocks and dirt at random. And when that single human finds rocks or dirt with the desired metal, huge groups of humans descend and start beating metal out of all the rocks and dirt they can find. And when the surface rocks and dirt run out, tearing giant holes in the Earth to get more rocks and dirt to beat on. Holes so big you can see them from space. From Day One of the human race’s existence, this has been how we get metal. Even today, two hundred thousand years on, we still do this the exact same way, if more efficiently and in greater quantity. We send individual humans wandering around beating metal out of rocks and dirt, then groups of humans descend to beat more metal out of more rocks and dirt. And people have become trapped by this old way, this old idea. To the point where, when they consider space and the future, all they see out there is the past---and more rocks, if not dirt. To the point where nations are actually starting to fight and snarl at each over asteroid and Moon mining rights, even when a far more, efficient better way to get metal was found over a hundred years ago. Even academics, who of all people should know better, are getting into the act. Entrepreneurs are also starting to form asteroid mining companies. (And here.) Somebody needs to gently jog their elbow and show them this article. Before these tech geniuses wind up flat broke and living under a bridge in San Jose. There is a problem with that old way of getting metal which has a direct bearing on why asteroid mining will never, ever, be allowed to happen. The concentration of metal in rock is in general EXTREMELY low.A gold concentration of forty-four parts per million (forty-four grams in a million grams) is considered high-grade ore. Twenty thousand ppm copper (a mere 2%) ore is considered to be very high-grade ore. So to get, say, a pound of metal, you basically have to process fifty to a hundred thousand pounds of rock. For space mining, all of the above problems with getting metal will continue to be true. Even in space, you will have to send out hundreds and hundreds of prospectors, miners, and robots, and you will still have to process a LOT of rocks. How incredibly inefficient--- and EXPENSIVE---to say the least. But people have just gotten used to this, and the idea there’s a much, much better, simpler way is going to seem bizarre. But there is a truly extreme danger that is completely unique to space mining. So extreme I suspect the human race, after balancing the risks and benefits, will simply decide to ban all forms of space mining, period. Rather than mining an asteroid---it is also possible to DROP an asteroid. Consider the security risk. Hundreds and hundreds of lone asteroid prospectors. Hundreds and hundreds of space miners. Every single one of whom is going to know exactly how to drop all the asteroids he wants on Earth. One asteroid from nowhere the human race could handle. Not ten asteroids. Not a HUNDRED asteroids. The threat potential is just unbelievable. 9/11 times a thousand. Entire cities, countries gone, all in the same ten minutes. The more the responsible authorities contemplate the threat potential, the more the responsible authorities will be inclined to never let this threat happen in the first place. Particularly when they are made aware of a much, much better, easier, CHEAPER way, with an easily manageable threat potential. What is this easier way? Well, along about 1900 or so, the human race figured out what elements---metals, for the problem we are considering---were made of. They're made of neutrons and protons and electrons. Now the human race understood exactly what elements were and why they had the properties they did. In particular, they knew what to do to change one element into another element. Add protons to or subtract protons from a nucleus, maybe add some neutrons to stabilize the new nucleus, sprinkle with electrons to taste, and waddya know, you have changed one element into another element. Transmutation, that Holy Grail of the alchemists, suddenly was, at least theoretically, an easy thing. Practice was another matter. The power needed was well beyond anything technically possible, then or today. Gigawatts and gigawatts of power pouring in for basically forever. All that power is needed to generate both very high temperatures and very strong magnetic fields, to force protons together close enough so they bind to each other instead of repelling each other. I suspect you would have to have tight control of your reaction plasma. VERY tight control. If your control slips, you stand a good chance of an accidental megaton thermonuclear blast wiping out a significant fraction of the Earth's surface. I hasten to add fusion reactors are not a problem because the plasmas are so very small. If your control slips a little, they just go out. A fusion factory, on the other hand, will have to generate huge amounts of mass that will require very large plasmas, hence I imagine there will always be a risk of a fusion factory going up in a mushroom cloud. If you add all these factors up, there is simply no place on Earth with enough power and with enough safety space around it that a fusion factory could be built. Not on Earth, anyway. Strangely enough, there is actually one place fairly close where there is power flooding out by the gigawatt forever and the occasional accidental megaton thermonuclear blast is not a biggie. The Sun. Sun-powered fusion factories. It all fits. Here is the broad outline of one way, although I certainly challenge the physicists out there to find a better way. Drag ONE iron asteroid in from the Asteroid Belt. Dangle it close enough to the Sun to make it a little mushy. (If purity is a problem, there is a chemical technique called “zone refining” that will solve the problem quite neatly.) While it’s mushy, forge it into a series of concentric iron doughnuts. Pull it back and let it cool. Iron is a conductive metal. Position the concentric doughnuts close enough to the Sun so electric currents are induced in the rings. This will generate an electromagnetic field in the middle of the rings. With big enough doughnuts, you will easily have a field intense enough in the middle to generate practical transmutation plasmas. One fortunate accident of Nature. Iron can also be a feedstock for our fusion factory. There’s plenty of it floating around out there. It’s conductive so it’s easy for an electromagnetic field to grab it. The left-overs from our starting asteroid can be the first material to be transmuted. The first batch will be free. The Sun is, I point out, ALREADY a transmutation plasma. It is transmuting hydrogen into helium. We would only be re-directing the transmutation to more useful elements. And now instead of scrabbling around in the rocks, risking our lives and our civilization, crossing our fingers and hoping for a one-in-a-million strike, we can simply turn the dial to “Samarium” or whatever and make all we want. One more ancient problem of the human race vanishes quietly away, one more victim of the human race’s advancing technological power, no muss, no fuss. And no security problem. No looking up at the sky and watching the asteroids coming in to destroy civilization because some terrorist finally got lucky. Gold, well, now, the sudden ability to manufacture gold bars by the million could be a problem, but the human race has already mostly moved away from gold as a measure of value. Sun-powered fusion factories could be reconfigured for other purposes. The Sun is known in astronomical circles as a "mildly variable" star. What this means in the real world is every once in a great while the Sun emits titanic blasts of civilization-destroying plasma. If we made those Sun-powered fusion factories self-replicating, it would then be possible to predict and control those random, civilization-destroying outbursts, and possibly even stop them from happening in the first place. The Sun is also going to have a problem with expanding into a giant red ball and burning up the Earth one day because it has run out of hydrogen. Self-replicating fusion factories could also be re-purposed for removing helium and injecting hydrogen to keep the Sun a nice stable yellow medium-sized star for as long as the human race wants. If those SETI scientists really want to find advanced alien civilizations (which would show my initial postulate was wrong), the way to do it is look for Suns that are somehow far more stable than they ought to be. Not Dyson spheres, not ring worlds, not Kardashev-type civilizations. Just Suns that have done lots and lots of nothing for millions of years. If Yuri Milner really wants to do some good for the human race, he should abandon that foolishly conceived SETI project and put the money into developing space-based Sun-powered fusion factories. Return On Investment, which is impossible to calculate with prospecting, is easily calculable for Sun-powered fusion factories, before you have to spend a single dime. Unlike that SETI rathole, Yuri will certainly get much, much richer, maybe even enough to become the world's first trillionaire. And that’s why asteroid mining will never happen. Erbium? Thulium? Californium? Ytterbium? Gadolinium? Scandium? Yttrium? Lutetium? Lanthanum? Neodymium? How many thousand tons do you want? Any particular isotopic ratio? END