

OFF - T

1] Interp – Unjust refers to a negative action

Black Laws No Date "What is Unjust?" <https://thelawdictionary.org/unjust/> //Elmer

Contrary to right and justice, or to the enjoyment of his rights by another, **or to the standards of conduct furnished by the laws.**

Private entities are non-governmental.

Dunk 11 Von Der Dunk, Frans G. "1. The Origins Of Authorisation: Article VI Of The Outer Space Treaty And International Space Law." National Space Legislation in Europe. Brill Nijhoff, 2011. 3-28. (University of Nebraska)//Elmer

4. **Interpreting** Article VI of the **Outer Space Treaty** One main novel feature of Article VI stood out with reference to the role of private enterprise in this context. Contrary to the version of the concept applicable under general international law, where 'direct state responsibility' only pertained to acts somehow directly attributable to a state and states could only be addressed for acts by private actors under 'indirect', 'due care' / 'due diligence' responsibility¹⁸, Article VI made no difference as to whether the activities at issue were the state's own ("whether such activities are carried on by governmental agencies" ...) or those of **private actors** (... "or by **non-governmental entities**"). The interests of the Soviet Union in ensuring that, whomever would actually conduct a certain space activity, some state or other could be held responsible for its compliance with applicable rules of space law to that extent had prevailed. However, the general acceptance of Article VI as cornerstone of the Outer Space Treaty unfortunately was far from the end of the story. Partly, this was the consequence of key principles being left undefined.

2] Violation – The Aff is a positive action by creating a new concept for Space, which is the treating of Space as a Global Commons and the gohering card talks abt sharing with public and private

3] Standards

a] Limits – that explodes predictability – it means that Aff's can both increase property rights in space that don't exist AND decrease appropriation, making the aff impossible to debate against.

b] Ground – wrecks Neg chances– we can't say appropriation is good since the 1AC can create new views on property rights that circumvent the DA's since they can say "Global Commons" solves. Independently - the Plan is both Extra-T - since it establishes a new property rights regime AND

Effects-T - the Global Commons isn't necessarily a reduction on Private Property, it involves actions like creating a governance system and redistribution/cooperation which is the critical link to the Colonialism Advantage - both are voters for Limits and Predictability

4] TVA – just say private space appropriation is bad

6] Use competing interps:

a. Reasonability causes a race to the bottom with testing the limit

b. Judge intervention produces bias

c. use competing interps on T bc you can't be reasonably topical

7] Drop the debater: for being abusive – we can't restart the round and i'm at a disadvantage for the round

Fairness o/ws education bc:

- 1) no one will do debate if it's unfair so theres no educational benefit**
- 2) Fairness is key to a balanced dialogue and developing research, critical thinking, and decisionmaking skills so we control the internal link to education**

No RVI's -

1] you don't deserve to win the round just because you proved you were fair that's illogical

2] No risk issue for the aff, you can go for it in the 2ar if I undercover but if I overallocate you can just kick it - kills fairness bc the aff uses it to suck time from the 2nr which exacerbates the 7-6 time skew in rebuttals

3] They can run theory on me too if I'm unfair so theory is reciprocal because we're both able to check abuse

4] they kill education since debaters bait theory and remove substantial clash on other issues

5] they create a chilling effect since good debaters bait the rvi so people are afraid to run theory - that leads to infinite abuse

OFF

States ought to apply and expand the Office Management and Budget (OMB) draft to include private entities in outer space

**The plan expands the domain of the draft to global private entities.
Holland and Reed '21**

Reed, M. A., & Holland, E. E. (2021, October 4). *White House to introduce 'zero trust' cybersecurity policy to federal agencies*. Akin Gump Strauss Hauer & Feld LLP. Retrieved December 29, 2021, from <https://www.akingump.com/en/experience/practices/cybersecurity-privacy-and-data-protection/ag-data-dive/white-house-to-introduce-zero-trust-cybersecurity-policy-to-federal-agencies.html>

The National Institute of Standards and Technology (NIST) released a second draft of its Zero Trust architecture publication in February 2020 and enhanced technologies to support the Zero Trust architecture are expanding.

What Would the OMB Draft Require for Government Agencies?

The OMB's draft Federal Zero Trust Strategy (the "OMB Draft") requires government agencies to achieve specific Zero Trust security goals by the end of Fiscal Year 2024.

The OMB Draft describes a federal Zero Trust architecture that:

1. Bolsters identity practices.
2. Relies on encryption and application testing instead of perimeter security.
3. Recognizes every device and resource the government has.
4. Supports intelligent automation of security actions.
5. Enables safe and robust use of cloud services.¹

These goals are organized according to the principals laid out in CISA's Zero Trust Maturity Model, developed to assist agencies as they implement the federal strategy. CISA's model "complements the OMB's Federal Zero Trust Strategy and is designed to provide agencies with a roadmap and resources to achieve an optimal zero trust environment."² The goals involve achievements in identity management, device management, network security, application policy and data protection.³ Agencies will have 60 days from the OMB Draft's publication to submit their implementation plan for these goals to OMB, along with a budget estimate, and 30 days to designate a lead to coordinate the effort.

What Would the OMB Draft Require for Government Contractors?

Although the proposed OMB Draft applies to federal agencies, it has significant implications for government contractors. The OMB Draft was preceded by President Biden's May 2021 EO 14208, which mandated rapid development of plans by every federal agency for modernizing their approach to cybersecurity, including implementation of Zero Trust architecture. Thus, Zero Trust architecture should be built into any software the federal government acquires or that its contractors use. This approach has been gaining momentum throughout industries that service government contracts, and last year many of the submissions for the Department of Defense mandated Zero Trust architecture in order to qualify for the bid. The Zero Trust framework is consistent with prior Defense Federal Acquisition Regulation Supplement (DFARS) mandates to protect Controlled Unclassified Information (CUI), such as DFARS 252.204-7012, NIST 800-171, ITAR 120.54, and CMMC Level 3.

Zero trust (zt) exponentially increases defenses. Shin '21

Shin, J. (2021, August 20). *Council Post: Why space is the next frontier for Cybersecurity*. Forbes. Retrieved December 29, 2021, from <https://www.forbes.com/sites/forbestechcouncil/2021/08/20/why-space-is-the-next-frontier-for-cybersecurity/?sh=60de17a741b1> John Shin is the founder and managing director at RSI Security and has over 18 years of Information Technology and Cybersecurity leadership experience working with industries across the board. As a PCI Qualified Security Assessor (QSA), Certified Information Systems Security Professional (CISM), and Project Management Professional (PMP), John works with businesses at virtually any size and scale to assess and improve cybersecurity strategy and posture. He's also the author of multiple research papers for the U.S. Air Force Research Laboratory and others.

The Role Of Regulatory Bodies And Frameworks

Governments and international bodies need to implement global standards for hacker-proofing technology along the entire space supply chain. In addition, there are existing cybersecurity standards that can be tweaked and implemented to make the space industrial ecosystem more secure.

One such solution that is already being discussed is the zero trust architecture. With zero trust, devices and equipment are hermetically sealed from a system's access standpoint, limiting unauthorized user access even within an organization. Zero trust reduces operational risk because even if a hacker gains access to systems on earth, gaining additional access is almost impossible due to zero trust architecture's decentralized nature.

The National Institute of Standards and Technology (NIST) in the United States could also play a pivotal role in pushing standardized cybersecurity frameworks. Just last month, NIST introduced a reference document for how cybersecurity standards may be introduced for commercial satellite operations. Once NIST receives industry feedback, more concrete recommendations should emerge.

OFF - Cybersecurity

Cybersecurity in space isn't sufficient - commercialization is a target of cyber attacks. Fidler '18

Fidler, D. P. (2018, April 3). *Cybersecurity and the New Era of Space Activities*. Council on Foreign Relations. Retrieved December 26, 2021, from <https://www.cfr.org/report/cybersecurity-and-new-era-space-activities#chapter-title-0-1> David P. Fidler is senior fellow for global health and cybersecurity at the Council on Foreign Relations. He is an expert in international law, cybersecurity, national security, terrorism, counterinsurgency, international trade, biosecurity, and global health.

Outer space has been a national security priority for spacefaring nations since the 1950s. Governments started space programs for intelligence, military, political, and scientific purposes and developed countermeasures against space-based threats from rivals, such as anti-satellite capabilities. Countries managed security competition by banning weapons of mass destruction in space and cooperating on peaceful uses of space. Government programs catalyzed private-sector adaptation of dual-use technologies to provide satellite communication services.

Despite the importance of satellites, the U.S. General Accounting Office concluded [PDF] in 2002 that efforts on critical infrastructure protection did not include the satellite industry, but should do so. Similarly, cybersecurity [or cysec] has not been a priority in government and private-sector space endeavors. One leading analysis [PDF] asserted that cybersecurity discussions often overlook space activities' vulnerability to cyberattack. For example, neither the UN governmental group of experts (GGE) on outer space nor the UN GGE on cyberspace addressed the convergence of their respective agendas.

Governments, critical infrastructure, and economies rely on space-dependent services—for example, the Global Positioning System (GPS)—that are vulnerable to hostile cyber operations. Geopolitical competition fuels the militarization of space, which heightens state incentives to devise cyber espionage, interference, and attack strategies against rivals' space operations. The United States suspects that China has engaged in cyber operations against U.S. satellites. Chinese military writings emphasize [PDF] the need to target satellites to "blind and deafen the enemy." The then commander of Air Force Space Command, General John E. Hyten, told Congress in 2016 that "adversaries are developing . . . cyber tools to deny, degrade, and destroy" [PDF] U.S. space capabilities that support

war fighting, critical infrastructure, and economic activity. Other countries likely believe the United States is preparing to conduct cyber espionage, disruption, and attack operations against the space assets of rival states.

The commercialization of space heightens cybersecurity concerns for many reasons, including market incentives to lower costs and innovate quickly, often at the expense of software and hardware security. Entrepreneurial activities—dubbed the **New Space** sector—are underway in space transport, space tourism, asteroid mining, lunar operations, and missions to Mars. A small-satellite (“smallsat”) revolution involving spacecraft far smaller than traditional satellites is unfolding. Networks of linked small sats can provide internet access, communicationS, data storage and transmission, imaging, and remote sensing. This next generation of satellites harnesses innovations in computing, electronics, miniaturization, imaging, sensors, big data, and artificial intelligence. Satellite services for **Earth observations from space** are growing. They support many policy and commercial purposes and contribute to agricultural productivity, transportation efficiency, and environmental monitoring. Commercial space activities use cutting-edge technologies and produce valuable data and are, thus, targets for cyber espionage, including economic cyber espionage, and cybercrime.

Challenges

Space agencies, the satellite industry, cybersecurity researchers, nongovernmental bodies, and intergovernmental satellite organizations show increasing awareness of the space cybersecurity challenge. Nevertheless, experts are worried. NASA’s then chief information security officer, Jeanette Hanna-Ruiz, warned that “it’s a matter of time before someone hacks into something in space.” Chatham House’s David Livingstone asserted that “people are just shuffling . . . paper around” and suggested that only “a disaster” might catalyze serious action. Josh Hartman, a former senior Pentagon official and Air Force officer, argued before the satellite industry’s first cybersecurity summit held in 2017 that, on cybersecurity, “most of the space community . . . has their heads in the sand.” The “attack surface” of space activities is expanding, but governments and industry are not taking adequate action.

Protecting space activities requires understanding the particular cyber vulnerabilities that arise in various space operations. For example, satellite cybersecurity encompasses the satellite itself, transmissions to and from Earth, and ground stations. U.S. military and intelligence satellite systems are **vulnerable** to kinetic and **cyberattacks**. Civilian smallsat systems might also prove insecure, given the lack of cybersecurity in their design, their use of commercial off-the-shelf components, and the vulnerabilities potentially created by connecting satellites to operate as complex, orbiting networks.

Neither international law nor diplomacy has grappled effectively with space cybersecurity. Multiple bodies of international law are relevant, but controversies about whether and how international law applies to cyberspace have adversely affected cyber diplomacy. Such travails have elevated the prominence of nongovernmental efforts to clarify international law’s application in cyberspace, such as the *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*. However, states continue to conduct cyber operations that violate international law. For example, the UN International Telecommunication Union prohibits interference with satellite transmissions, yet such interference frequently occurs.

The time to act is now - space privatization makes cyber attacks more dangerous and likely. Khalili 21

Khalili, J. (2021, September 18). *Kamikaze satellites and Shuttles Adrift: Why Cyberattacks are a major threat to humanity's ambitions in space*. TechRadar. Retrieved December 26, 2021, from <https://www.techradar.com/news/kamikaze-satellites-and-shuttles-adrift-why-cyberattacks-are-a-major-threat-to-our-ambitions-in-space>

No matter how well space infrastructure is protected, however, criminals will find a way to launch attacks. The question then becomes: who and why?

Only a matter of time

At the moment, the incentives for cyber actors to launch attacks against space infrastructure are relatively few. With little opportunity to generate revenue, only a minority of hackers are likely to be interested.

The current space cybercrime landscape is dominated by state-sponsored actors. Yamout told us. These individuals or groups are not in it for money, but rather information that might accelerate domestic space research or provide an intelligence advantage over a rival nation. At a stretch, cyber mercenaries employed by private businesses may also be involved in intelligence gathering activities at this stage.

However, as the number of private businesses operating in space increases (think space mining and telecommunications, as well as tourism), the door will open to a variety of different kinds of attack, from a wider range of actors.

“Cybercriminals are only really interested in making money,” explained Yamout. “Once space is commercialized and technology becomes sophisticated enough to install malware, criminals will be able to deploy ransomware against critical infrastructure, for example.”

“This is a big deal, because infrastructure in space costs a lot of money and is not easy to replace, so criminals will have significant leverage in negotiations.”

The fundamental principles of cybercrime are the same in space as they are on earth. As money floods into the sector, it's likely that some of it will flow into the pockets of cybercriminals too.

It's even likely, he says, that hacktivists and script kiddies (amateur hackers looking to hone their craft) could cause problems, launching nuisance attacks that bypass the basic levels of protection, if only to prove that it's possible.

Cyberattacks spiral to all-out nuclear conflict.

Klare 19 [Michael; November 2019; Professor emeritus of peace and world security studies at Hampshire College; "Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation," Arms Control Association, <https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation>]

Yet another pathway to escalation could arise from a cascading series of cyberstrikes and counterstrikes against vital national infrastructure rather than on military targets. All major powers, along with Iran and North Korea, have developed and deployed cyberweapons designed to disrupt and destroy major elements of an adversary's key economic systems, such as power grids, financial systems, and transportation networks. As noted, Russia has infiltrated the U.S. electrical grid, and it is widely believed that the United States has done the same in Russia.¹² The Pentagon has also devised a plan known as "Nitro Zeus," intended to immobilize the entire Iranian economy and so force it to capitulate to U.S. demands or, if that approach failed, to pave the way for a crippling air and missile attack.¹³ The danger here is that economic attacks of this sort, if undertaken during a period of tension and crisis, could lead to a series of tit-for-tat attacks against ever more vital elements of an adversary's critical infrastructure, producing widespread chaos and harm and eventually leading one side to initiate kinetic attacks on critical military targets, risking the slippery slope to nuclear conflict. For example, a Russian cyberattack on the U.S. power grid could trigger U.S. attacks on Russian energy and financial systems, causing widespread disorder in both countries and generating an impulse for even more devastating attacks. At some point, such attacks "could lead to major conflict and possibly nuclear war."¹⁴

OFF - Xi

Xi's regime is stable now, but its success depends on strong growth and private sector development.

Mitter and Johnson 21 [Rana Mitter and Elsbeth Johnson, [Rana Mitter](#) is a professor of the history and politics of modern China at Oxford. [Elsbeth Johnson](#), formerly the strategy director for Prudential PLC's Asian business, is a senior lecturer at MIT's Sloan School of Management and the founder of SystemShift, a consulting firm. May-June 2021, "What the West Gets Wrong About China," Harvard Business Review, <https://hbr.org/2021/05/what-the-west-gets-wrong-about-china> accessed 12/14/21]

In China, however, growth has come in the context of stable communist rule. Suggesting that democracy and growth are not inevitably mutually dependent. In fact, many Chinese believe that the country's recent economic achievements—large-scale poverty reduction, huge infrastructure investment, and development as a world-class tech innovator—have come about because of, not despite, China's authoritarian form of government. Its aggressive handling of Covid-19—in sharp contrast to that of many Western countries with higher death rates and later, less-stringent lockdowns—has, if anything, reinforced that view.

China has also defied predictions that its authoritarianism would inhibit its capacity to innovate. It is a global leader in AI, biotech, and space exploration. Some of its technological successes have been driven by market forces: People wanted to buy goods or communicate more easily, and the likes of Alibaba and Tencent have helped them do just that. But much of the technological progress has come from a highly innovative and well-funded military that has invested heavily in China's burgeoning new industries. This, of course, mirrors the role of U.S. defense and intelligence spending in the development of Silicon Valley. But in China the consumer applications have come faster, making more obvious the link between government investment and products and services that benefit individuals. That's why ordinary Chinese people see Chinese companies such as Alibaba, Huawei, and TikTok

as sources of national pride—international vanguards of Chinese success—rather than simply sources of jobs or GDP, as they might be viewed in the West.

Thus July 2020 polling data from the Ash Center at Harvard's Kennedy School of Government revealed 95% satisfaction with the Beijing government among Chinese citizens. Our own experiences on the ground in China confirm this. Most ordinary people we meet don't feel that the authoritarian state is solely oppressive, although it can be that; for them it also provides opportunity. A cleaner in Chongqing now owns several apartments because the CCP reformed property laws. A Shanghai journalist is paid by her state-controlled magazine to fly around the world for stories on global lifestyle trends. A young student in Nanjing can study propulsion physics at Beijing's Tsinghua University thanks to social mobility and the party's significant investment in scientific research.

Xi has committed to the commercial space industry as the linchpin of China's rise – the plan is seen as a complete 180

Patel 21 [Neel V. Patel, Neel is a space reporter for MIT Technology Review. 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/> accessed 12/14/21]

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.

Changes in governmental perception threaten the CCP's legitimacy

Weiss 19 Jessica Weiss 1-29-2019 "Authoritarian Audiences, Rhetoric, and Propaganda in International Crises: Evidence from China" <http://www.jessicachenweiss.com/uploads/3/0/6/3/30636001/19-01-24-elite-statements-isq-ca.pdf> (Associate Professor of Government at Cornell University)//

Public support—or the appearance of it—matters to many autocracies. As Ithiel de Sola Pool writes, modern dictatorships are “*highly conscious of public opinion and make major efforts to affect it.*”⁶ Mao Zedong told his comrades: “When you make revolution, you must first manage public opinion.”⁷ Because **autocracies** often **rely on nationalist mythmaking**,⁸ **success or failure in defending the national honor in international crises could** burnish the leadership’s patriotic credentials or **spark opposition**. **Shared outrage at the regime’s foreign policy failures could galvanize street protests or elite fissures, creating intraparty upheaval** or inviting military officers to step in to restore order. **Fearing a domestic backlash, authoritarian leaders may feel compelled to take a tough international stance.** Although authoritarian leaders are rarely held accountable to public opinion through free and fair elections, fears of popular unrest and irregular ouster often weigh heavily on autocrats seeking to maximize their tenure in office. Considering the harsh consequences that authoritarian elites face if pushed out of office, **even a small increase in the probability of ouster could alter** authoritarian **incentives in international crises**.⁹ A **history of nationalist uprisings make Chinese** citizens and leaders especially **aware of the linkage** between international disputes and domestic unrest. The weakness of the PRC’s predecessor in defending Chinese sovereignty at the Paris Peace Conference in 1919 galvanized protests and a general strike, forcing the government to sack three officials and reject the Treaty of Versailles, which awarded territories in China to Japan. **These precedents have made Chinese officials particularly sensitive to the appearance of hewing to public opinion.** As the People’s Daily chief editor wrote: “History and reality have shown us that public opinion and regime safety are inseparable.”¹⁰ One Chinese scholar even claimed: “the Chinese government probably knows the public’s opinion better and reacts to it more directly than even the U.S. government.”¹¹

Xi will go to war to distract from governmental issues which escalates

Norris 17 William J. Geostategic Implications of China’s Twin Economic Challenges. CFR Discussion Paper, 2017. (Associate professor of Chinese foreign and security policy at Texas A&M University’s Bush School of Government and Public Service)//

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 on 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 Taiwan, India, and the South China Sea (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 **Weakened Fetters of Economic Interdependence** If China successfully transitioned away from its export-driven growth model toward a consumption-driven economic engine over the next four or five years, it could no longer feel as constrained by economic interdependence. To the extent that such constraints are loosened, the U.S.-China relationship will be more prone to conflict and friction.²⁴ While China has never been the archetypal liberal economic power bent on benign integration with the global economy, its export-driven growth model produced a strong strategic preference for stability. Although past behavior is not necessarily indicative of future strategic calculus, China's "economic circuit breaker" logic seems to have held its most aggressive nationalism below the threshold of war since 1979. A China that is both comparatively strong and less dependent on the global economy would be a novel development in modern geopolitics. As China changes the composition of its international economic linkages, global integration could place fewer constraints on it. Whereas China has been highly reliant on the import of raw materials and semifinished goods for reexport, a consumption-driven China could have a different international trade profile. China could still rely on imported goods, but their centrality to the country's overall economic growth would be altered. Imports of luxury goods, consumer products, international brands, and services may not exert a significant constraining influence, since loss of access to such items may not be seen as strategically vital. If these flows were interrupted or jeopardized, the result would be more akin to an inconvenience than a strategic setback for China's rise. That said, China is likely to continue to highly depend on imported oil even if the economic end to which that energy resource is directed shifts away from industrial and export production toward domestic consumption.

US-China war goes nuclear – crisis mis-management ensures conventional escalation - extinction

Kulacki 20 [Dr. Gregory Kulacki focuses on cross-cultural communication between the United States and China on nuclear and space arms control and is the China Project Manager for the Global Security Program at the Union of Concerned Scientists, 2020. Would China Use Nuclear Weapons First In A War With The United States?, Thediplomat.com, <https://thediplomat.com/2020/04/would-china-use-nuclear-weapons-first-in-a-war-with-the-united-states/>]

Admiral Charles A. Richard, the head of the U.S. Strategic Command, recently told the Senate Armed Service Committee he “could drive a truck” through the holes in China’s no first use policy. But when Senator John Hawley (R-MO) asked him why he said that, Commander Richard backtracked, described China’s policy as “very opaque” and said his assessment was based on “very little” information. That’s surprising.

China has been exceptionally clear about its intentions on the possible first use of nuclear weapons. On the day of its first nuclear test on October 16, 1964, China declared it “will never at any time or under any circumstances be the first to use nuclear weapons.” That unambiguous statement has been a cornerstone of Chinese nuclear weapons policy for 56 years and has been repeated frequently in authoritative Chinese publications for domestic and international audiences, including a highly classified training manual for the operators of China’s nuclear forces. Richard should know about those publications, particularly the training manual. A U.S. Department of Defense translation has been circulating within the U.S. nuclear weapons policy community for more than a decade. The commander’s comments to the committee indicate a familiarity with the most controversial section of the manual, which, in the eyes of some U.S. analysts, indicates there may be some circumstances where **China would use nuclear weapons first in a war with the United States**. This U.S. misperception is understandable, especially given the difficulties the Defense Department encountered translating the text into English. The language, carefully considered in the context of the entire book, articulates a strong reaffirmation of China’s no first use policy. But it also reveals **Chinese military planners are struggling with crisis management and considering steps that could create ambiguity with disastrous consequences**. Towards the end of the 405-page text on the operations of China’s strategic rocket forces, in a chapter entitled, “Second Artillery Deterrence Operations,” the authors explain what China’s nuclear forces train to do if **“a strong military power possessing nuclear-armed missiles and an absolute advantage in high-tech conventional weapons is carrying out intense and continuous attacks against our major strategic targets and we have no good military strategy to resist the enemy.”** The military power **they’re talking about** is **the United States**. The authors indicate China’s nuclear missile forces train to take specific steps, including increasing readiness and conducting launch exercises, to “dissuade the continuation of the strong enemy’s conventional attacks.” The manual refers to these steps as an “adjustment” to China’s nuclear policy and a “lowering” of China’s threshold for brandishing its nuclear forces. Chinese leaders would only take these steps in extreme circumstances. The text highlights several **triggers such as U.S. conventional bombing of China’s nuclear and hydroelectric power plants, heavy conventional bombing of large cities like Beijing and Shanghai, or other acts of conventional warfare that “seriously threatened” the “safety and survival” of the nation**. U.S. Misunderstanding Richard seems to believe this planned adjustment in China’s nuclear posture means **China is preparing to use nuclear weapons first under these circumstances**. He told Hawley that there are a “number of situations where they may conclude that first use has occurred that do not meet our definition of first use.” The head of the U.S. Strategic Command appears to assume, as do other U.S. analysts, that the **Chinese would interpret these types of U.S. conventional attacks as equivalent to a U.S. first use of nuclear weapons against China**. But that’s not what the text says. “Lowering the threshold” refers to China putting its nuclear weapons on alert — it does not indicate Chinese leaders might lower their threshold for deciding to use nuclear weapons in a crisis. Nor does the text indicate Chinese nuclear forces are training to launch nuclear weapons first in a war with the United States. China, unlike the United States, keeps its nuclear forces off-alert. Its warheads are not mated to its missiles. China’s nuclear-armed submarines are not continuously at sea on armed patrols. The manual describes how China’s nuclear warheads and the missiles that deliver them are controlled by two separate chains of command. Chinese missileers train to bring them together and launch them after China has been attacked with nuclear weapons. All of these behaviors are consistent with a no first use policy. The “adjustment” Chinese nuclear forces are preparing to make if the United States is bombing China with impunity is to place China’s nuclear forces in a state of readiness similar to the state the nuclear forces of the United States are in all the time. This step is intended not only to end the bombing, but also to convince U.S. decision-makers they cannot expect to destroy China’s nuclear retaliatory capability if the crisis escalates. Chinese Miscalculation Unfortunately, alerting Chinese nuclear forces at such a moment could have terrifying consequences. Given the relatively small size of China’s nuclear force, a U.S. president might be tempted to try to

limit the possible damage from a Chinese nuclear attack by destroying as many of China's nuclear weapons as possible before they're launched, especially if the head of the U.S. Strategic Command told the president China was preparing to strike first. One study concluded that if the United States used nuclear weapons to attempt to knock out a small fraction of the Chinese ICBMs that could reach the United States it may kill tens of millions of Chinese civilians. The authors of the text assume alerting China's nuclear forces would "create a great shock in the enemy's psyche." That's a fair assumption. But they also assume this shock could "dissuade the continuation of the strong enemy's conventional attacks against our major strategic targets." That's highly questionable. There is a substantial risk the United States would respond to this implicit Chinese threat to use nuclear weapons by escalating, rather than halting, its conventional attacks. If China's nuclear forces were targeted, it would put even greater strain on the operators of China's nuclear forces. A slippery slope to nuclear war Chinese military planners are aware that attempting to coerce the United States into halting conventional bombardment by alerting their nuclear forces could fail. They also know it might trigger a nuclear war. But if it does, they are equally clear China won't be the one to start it. Nuclear attack is often preceded by nuclear coercion. Because of this, in the midst of the process of a high, strong degree of nuclear coercion we should prepare well for a nuclear retaliatory attack. The more complete the preparation, the higher the credibility of nuclear coercion, the easier it is to accomplish the objective of nuclear coercion, and the lower the possibility that the nuclear missile forces will be used in actual fighting. They assume if China demonstrates it is well prepared to retaliate the United States would not risk a damage limitation strike using nuclear weapons. And even if the United States were to attack China's nuclear forces with conventional weapons, China still would not strike first. In the opening section of the next chapter on "nuclear retaliatory attack operations" the manual instructs, as it does on numerous occasions throughout the entire text: According to our country's principle, its stand of no first use of nuclear weapons, the Second Artillery will carry out a nuclear missile attack against the enemy's important strategic targets, according to the combat orders of the Supreme Command, only after the enemy has carried out a nuclear attack against our country. Richard is wrong. There are no holes in China's no first use policy. But the worse-case planning articulated in this highly classified military text is a significant and deeply troubling departure from China's traditional thinking about the role of nuclear weapons. Mao Zedong famously called nuclear weapons "a paper tiger." Many assumed he was being cavalier about the consequences of nuclear war. But what he meant is that they would not be used to fight and win wars. U.S. nuclear threats during the Korean War and the Taiwan Strait Crisis in the 1950s – threats not followed by an actual nuclear attack – validated Mao's intuition that nuclear weapons were primarily psychological weapons. Chinese leaders decided to acquire nuclear weapons to free their minds from what Mao's generation called "nuclear blackmail." A former director of China's nuclear weapons laboratories told me China developed them so its leaders could "sit up with a straight spine." Countering nuclear blackmail – along with compelling other nuclear weapons states to negotiate their elimination – were the only two purposes Chinese nuclear weapons were meant to serve. Contemporary Chinese military planners appear to have added a new purpose: compelling the United States to halt a conventional attack. Even though it only applies in extreme circumstances, it increases the risk that a war between the United States and China will end in a nuclear exchange with unpredictable and catastrophic consequences. Adding this new purpose could also be the first step on a slippery slope to an incremental broadening the role of nuclear weapons in Chinese national security policy. Americans would be a lot safer if we could avoid that. The United States government should applaud China's no first use policy instead of repeatedly calling it into question. And it would be wise to adopt the same policy for the United States. If both countries declared they would never use nuclear weapons first it may not guarantee they can avoid a nuclear exchange during a military crisis, but it would make one far less likely.

Nuke war causes extinction AND outweighs *other* existential risks

PND 16. internally citing Zbigniew Brzezinski, Council of Foreign Relations and former national security adviser to President Carter, Toon and Robock's 2012 study on nuclear winter in the Bulletin of Atomic Scientists, Gareth Evans' International Commission on Nuclear Non-proliferation and Disarmament Report, Congressional EMP studies, studies on nuclear winter by Seth Baum of the Global Catastrophic Risk Institute and Martin Hellman of Stanford University, and U.S. and Russian former Defense Secretaries and former heads of nuclear missile forces, brief submitted to the United Nations General Assembly, Open-Ended Working Group on nuclear risks. A/AC.286/NGO/13. 05-03-2016.

<http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/Documents/NGO13.pdf>

Consequences human survival 12. Even if the 'other' side does NOT launch in response the smoke from 'their' burning cities (incinerated by 'us') will still make 'our' country (and the rest of the world) uninhabitable, potentially inducing global famine lasting up to decades. Toon and Robock note in 'Self Assured Destruction', in the Bulletin of Atomic Scientists 68/5, 2012, that: 13. "A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by

either side could be suicidal, resulting in self assured destruction. Even a 'small' nuclear war between India and Pakistan, with each country detonating 50 Hiroshima-size atom bombs--only about 0.03 percent of the global nuclear arsenal's explosive power--as air bursts in urban areas, could produce so much smoke that temperatures would fall below those of the Little Ice Age of the fourteenth to nineteenth centuries, shortening the growing season around the world and threatening the global food supply. Furthermore, there would be massive ozone depletion, allowing more ultraviolet radiation to reach Earth's surface. Recent studies predict that agricultural production in parts of the United States and China would decline by about 20 percent for four years, and by 10 percent for a decade." 14. A conflagration involving USA/NATO forces and those of Russian federation would most likely cause the deaths of most/nearly all all humans (and severely impact/extinguish other species) as well as destroying the delicate interwoven techno-structure on which latter-day 'civilization' has come to depend. Temperatures would drop to below those of the last ice-age for up to 30 years as a result of the lofting of up to 180 million tonnes of very black soot into the stratosphere where it would remain for decades. 15. Though human ingenuity and resilience shouldn't be underestimated, human survival itself is arguably problematic, to put it mildly, under a 2000+ warhead USA/Russian federation scenario. 16. The Joint Statement on Catastrophic Humanitarian Consequences signed October 2013 by 146 governments mentioned 'Human Survival' no less than 5 times. The most recent (December 2014) one gives it a highly prominent place. Gareth Evans' ICNND (International Commission on Nuclear Non-proliferation and Disarmament) Report made it clear that it saw the threat posed by nuclear weapons use as one that at least threatens what we now call 'civilization' and that potentially threatens human survival with an immediacy that even climate change does not, though we can see the results of climate change here and now and of course the immediate post-nuclear results for Hiroshima and Nagasaki as well.

ON CASE

On solvency:

Russia and China say no, or the plan gets watered down.

Bahney and Pearl 19 [Benjamin Bahney and Jonathan Pearl, 3-26-2019, "Why Creating a Space Force Changes Nothing," BENJAMIN BAHNEY and JONATHAN PEARL are Senior Fellows at the Lawrence Livermore National Laboratory's Center for Global Security Research and contributing authors to [Cross Domain Deterrence: Strategy in an Era of Complexity](https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing). Foreign Affairs, <https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing> accessed 12/10/21]

As Russia and China continue to push forward, U.S. policymakers may be tempted to use treaties and diplomacy to head off their efforts entirely. This option, although alluring on paper, is simply not feasible. Existing treaties designed to limit military competition in space have had little success in actually doing so. The 1967 Outer Space Treaty bans parties from placing nuclear weapons or other weapons of mass destruction in space, on the moon, or on other celestial bodies, but it has no formal mechanism for verifying compliance, and places no restrictions on the development or deployment in space of conventional antisatellite weapons. Even if it were possible to convince Moscow and Beijing of the benefits of comprehensive space arms control, existing technology makes it extremely difficult to verify compliance with the necessary treaty provisions—and without comprehensive and reliable verification, treaties are toothless. Moreover,

regulating the development and deployment of antisatellite weapons is extremely difficult, both because they include such a broad and diverse range of technologies and because many types of antisatellite weapons can be concealed or explained away as having some other use. Unsurprisingly, Russia and China's draft Treaty on the Prevention of Placement of Weapons in Space, which they have been pushing for several years now, has an unenforceable definition of what constitutes a "weapon" and does nothing at all to address ground-based antisatellite weapons development.

No internal link between establishing outer space as a global commons and an equitable distribution of space to states –if the aff does then that's just blatantly extra topical, that's a voting issue for limits and ground since they can take on an infinite amount of permutations of planks to solve for neg ground which hurts in depth clash and engagement. It's a double bind: either there's no solvency or they're extra-t

On debris:

Kessler takes centuries and adaptation solves

Ted Muelhaupt 19, Associate Principal Director of the Systems Analysis and Simulation Subdivision (SASS) and Manager of the Center for Orbital and Reentry Debris Studies at The Aerospace Corporation, M.S., B.S. Aerospace and Aeronautical Engineering & Mechanics, University of Minnesota - Twin Cities, Senior Member of the American Institute of Aeronautics and Astronautics, "How Quickly Would It Take For the Kessler Syndrome To Destroy All The Satellites In LEO? And Could You See This Happening From Earth?", Quora, 2/28/2019, <https://www.quora.com/How-quickly-would-it-take-for-the-Kessler-Syndrome-to-destroy-all-the-satellites-in-LEO-And-could-you-see-this-happening-from-Earth>

The dynamics of the Kessler Syndrome are real, and most people studying it agree on the concept: if there is sufficient density of objects and mass, a chain reaction of debris breaking up objects and creating more debris can occur. But the timescale of this process takes decades and centuries. There are many assumptions that go into these models. Though there is still argument about this, many people in the field think that the process is already underway in low earth orbit. But others, including myself, think we can stop it if we take action. This is a slow motion disaster that we can prevent.

But in spite of hype to the contrary, we will never "lose access" to space. Certain missions may become impractical or too expensive, and we may decide that some orbits are too risky for humans. Even that depends on the tolerance for the risk. But robots don't have mothers, and if we feel it is worthwhile we will take the risk and fly the satellites where we need to.

To the specifics of the question, it will take many decades. It will not destroy all satellites in LEO. You won't be able to see it from the ground unless you were extraordinarily lucky, and you happened to see a flash from a collision in the instant you were looking, with just the right lighting.

No debris - 4 warrants

Daniel Von **Fange 17**, Web Application Engineer, Founder and Owner of LeanCoder, Full Stack,

Polyglot Web Developer, "Kessler Syndrome is Over Hyped", 5/21/2017,
http://braino.org/essays/kessler_syndrome_is_over_hyped/

In **real life**, there's **a lot of factors** that **make Kessler syndrome even less of a problem** than our worst case though experiment.

- **Debris** would be **spread over** a **volume** of space, **not a single orbital surface**, making collisions **orders of magnitudes less likely**.
- **Most** impact debris will **have** a **slower orbital velocity** than either of its original pieces - **this makes it deorbit much sooner**.
- Any collision will create large and small objects. **Small objects** are much more affected by atmospheric drag and **deorbit** faster, even **in a few months** from high LEO. **Larger objects can be tracked** by earth based radar **and avoided**.
- The planned big new **constellations are not in High LEO**, but **in Low LEO** for faster communications with the earth. They **aren't an issue** for Kessler.
- Most importantly, **all new** satellite **launches** since the **1990's** are required to **include a plan to** get rid of the satellite at the end of its useful life (usually by **deorbiting**)

so **the realistic worst case** is that **insurance premiums on satellites go up a bit**. Given the **current trend** toward **much smaller, cheaper micro satellites**, this **wouldn't even have a huge effect**.

I'm removing Kessler Syndrome from my list of things to worry about.

On the cap advantage:

It's advantage is non unique. Cap will still be very prevalent among governments in space and nothing will change on earth so even if you don't believe cap is good, it still will be a thing on earth and impacts will still happen

All your solvency advocates assume the aff creates legal institutions and frameworks to create sustainable use of outer space – but you haven't read an internal link that says simply the declaration of outer space as a global commons does that

We control uniqueness – the world is getting better, globalization is good

Torres and Pinker '16-- (Phil Torres, American scientist, journalist, television host, photographer, and explorer, host of the television show TechKnow, PhD @ Rice University in Biology; Steven Pinker, American cognitive scientist, psychologist, linguist, and popular science author, head of psychology department @ Harvard University, "The United States Is Not an Apocalyptic Wasteland, Explains Steven Pinker", December 6th, 2016, https://motherboard.vice.com/en_us/article/8q8b85/steven-pinker-talks-about-donald-trumps-victory-long-term-progress-and-wheth)

Donald Trump's rise to power was driven in part by an apocalyptic narrative according to which, in a phrase, you are in grave danger. This is consistent with many people's intuitions about the world, given the ongoing threat of global terrorism, the US's slow recovery from the Great Recession, and a sense that the Washington establishment is corrupt and doesn't care about the average citizen's needs. Is Trump's apocalypticism right? Are we living in an exceptionally dangerous period of human history? Are these the desperate times that call for desperate measures? According to the Harvard cognitive scientist Steven Pinker, the answer is a resounding No. In his 2011 book *The Better Angels of Our Nature*, Pinker presents a mountain of evidence showing that violence has been declining for millennia—a trend that has continued through the twentieth century and up to the present. For example, since World War II there have been no major wars between the world's great powers, a phenomenon dubbed the "Long Peace," and Pinker argues that the end of the Cold War inaugurated a "New Peace" that's marked by a worldwide decline of "organized conflicts of all kinds—civil wars, genocides, repression by autocratic governments, and terrorist attacks." But will this trend continue in a post-Trump, post-truth world? Pinker is clear in *Better Angels* that it might not—for instance, there could be accessible "weapons of total destruction" (WTDs) that precipitate a global catastrophe, or authoritarian demagogues that misuse and abuse their political power. To understand what Trump's victory means for America and, even more, what it means for the future of civilization, I contacted Pinker via email. Motherboard: Trump has repeatedly painted an apocalyptic picture of contemporary America. He has talked about (black) people getting shot while walking down the street, about terrorists disguising themselves as refugees fleeing the atrocities of Syria, and about Mexico sending its "criminals" and "rapists" across the southern border. Could you briefly explain why this characterization of the contemporary US is factually wrong? Steven Pinker: Unfortunately, it's all too easy for newsreaders to believe that apocalyptic picture. The news media give lavish coverage to violent incidents, seldom follow up on negative reportage in the past, and rarely put events in statistical or historical perspective. Worse, they allow themselves to be played by violence impresarios, namely terrorists and rampage killers, who correctly anticipate that they can attract the world's attention by killing a number of innocent people at once. This is true not just of tabloids and cable news chasing eyeballs and clicks, but of high-quality outlets who feel that by highlighting what goes wrong, they are discharging their duty as watchdogs, muckrakers, and afflictors of the comfortable. The facts are as follows. The rate of violent crime is lower now than it was at any time between 1966 and 2009. Immigrants have a lower rate of violent crime than American citizens. Terrorists kill just three-tenths of one percent of all American homicide victims. The rate of death from terrorism in the United States was higher in the early 1970s than it is today. And since 2002, more Americans have been killed by right-wing American terrorists than by Islamic terrorists. It's true that the rate of violent crime went up between 2014 and 2015, most likely a consequence of the retreat of active policing since Ferguson. But it's a small uptick in the context of the massive downward trend since 1992. "A modern liberal democracy is a precious achievement." The media and intelligentsia were partly complicit in Trump's depiction of the world as a dystopia headed for even greater disaster. "Charge the cockpit or you die!" cried the pro-Trump intellectual right. "I'd rather see the empire burn to the ground under Trump, opening up at least the possibility of radical change, than cruise on autopilot under Clinton," said the pro-Trump left. When people believe that the world is heading off a cliff, they are receptive to the perennial appeal of demagogues: "What do you have to lose?" But if the media and intellectuals put events into statistical and historical context, rather than constantly crying "crisis," they would make it clearer what the answer to that question is. Revolutionary regimes from Nazi Germany and Maoist China to contemporary Venezuela show that people have a tremendous amount to lose when a charismatic leader forces a radical personal vision on a society. A modern liberal democracy is a precious achievement. Until the messiah comes, it will always have problems, but it's better to solve problems than to start a conflagration and hope for the best. In *Better Angels*, you discuss something called "integrative complexity," which "captures a sense of intellectual balance, nuance, and sophistication." The integrative complexity of a political speech, for example, can be determined by counting the frequency of words like "absolutely," "always," and "definitely"—all favorites of Trump's—where simple,

categorical words like these indicate low complexity. In fact, linguistic analyses show that Trump literally speaks at a fourth-grade reading level. This appears worrisome because you also note that war is historically more likely when political leaders have low integrative complexity scores. Does this make you anxious about Trump getting the US embroiled in new conflicts? The work was done by the political psychologist Philip Tetlock, and yes, this does make me anxious. Overconfident, good-versus-evil thinking encourages impulsive military action. We're safer with leaders who think through the costs and benefits of different options, including ones that may take time to have their effects, such as sanctions, containment, and other forms of soft power. Though I'm wary of seeming to be pointing to any bright side—there is no bright side to this election—Trump has suggested that he is averse to foreign interventions (insofar as one can read any intentions at all from his contradictory statements). So he might continue or even extend Obama's policy of "Don't do stupid [stuff]." This was the "rare piece of good news" suggested by Nils Petter Gleditsch, one of the world's foremost peace researchers, in a November 15 blog post. Trump's presidential campaign was successful in part because of the "alt-right" movement. At the heart of this movement is a rejection of globalism, which has fueled opposition to diversity, multiculturalism, and immigration. Do you think such opposition is in the end a losing cause? Is globalization inevitable. Yes, globalization is inevitable, for a number of reasons. Many of our severest problems are inherently global, particularly climate, epidemics, migrants, and terrorism. Pretending they don't exist is not tenable, at least not forever, and they can be solved only through international cooperation. Also, globalization has massive benefits—more affordable goods, larger markets for exports, a huge reduction in global poverty—which also can't be denied indefinitely. While globalization doesn't benefit everyone equally—it has increased unemployment in domestic lower-skilled occupations—most of those job losses would have happened anyway because of automation, and have to be addressed, globalization or no. Third, with the internet and inexpensive travel, there will be no stopping the flow of people and ideas. This is particularly true among younger people, who partake of a global youth culture, and as we saw in the UK following Brexit, resent their elders' attempts to restrict their opportunities. In my considered opinion, one of the greatest casualties of this election is science. For example, Trump appointed Myron Ebell, a dogmatic climate denier who holds worrisome views about the safety of agrichemicals, to be the "lead agent in choosing personnel and setting the direction of the federal agencies that address climate change and environmental policy more broadly." Are you worried about the consequences of a Trump presidency for scientific literacy? Why do you think science is so important for people to understand? I am indeed worried. Science is important because it seeks true explanations of the world. Defying its conclusions is bound to lead to delusions and dangerous choices. Science also offers a model for how to think rationally: that one must acknowledge one's fallibility, submit one's beliefs to empirical tests, and abandon ideas that are shown to be wrong. The denial of the massive evidence for human-made climate change is atrocious and one of the most dangerous consequences of a Trump presidency. The small consolation is that when it comes to scientific issues, reality won't go away regardless of what you deny. While we may lose four precious years of US federal action, we will be forced to deal with climate change soon enough. And actors other than the US government are already dealing with it: state and local governments, scientists and technologists, businesses that rationally plan for the future, and the governments of other countries. It's important to realize, though, that the problem is not scientific literacy. Most laypeople who believe in evolution or who acknowledge human-made climate change are just as ignorant of science as those who deny them. The issue is identity. People treat opinions as badges of loyalty to a tribe or coalition. If "good people," people like them, believe X, they will believe X. Some climate activists believe that the worst thing that happened to the movement was Al Gore becoming its implicit spokesperson, branding it as a left-wing movement. Before that, the issue was nowhere near as polarized. The challenge is to dissociate scientific hypotheses from identity politics and bring people around to the radical notion—the core of the Scientific Revolution and the Enlightenment—that they should believe things only if they are true. How to do this is an unsolved rhetorical challenge, but finding spokespeople who break out of their coalitional stereotypes—such as prominent conservatives who acknowledge human-made climate change—is a start. You note that the number of autocracies around the world is decreasing while the opposite is true of democracies. Given Trump's authoritarianism—as manifest in frequent campaign statements that he would "totally accept" the election results "if I win"—do you see Trump as a threat to American democracy? Could this be the beginning of fascism in America? Yes, he is a threat, and yes, it could be the beginning. The question is, what are the chances? No one knows, but I think that after 240 years, American democracy is too robust to be overturned by one man. To convert a democracy into an autocracy requires disabling an enormous, distributed infrastructure: legislators who have to respond to constituents and lobbyists, judges with reputations to uphold, bureaucrats who are responsible for the missions of their departments, and the tens of millions of people who have to carry out their jobs in order that the government and society function. "As you are forced to deal with other people who are not like yourself, you are automatically driven to universal values like reason, science, and human flourishing." It's true that a ruthless autocrat can intimidate enough players in enough positions to consolidate absolute rule. But even autocrats can be sent packing when enough of their citizens stop playing along. As Erica Chenoweth and Maria Stephan have shown, this happened many times in the 20th and 21st centuries. But it's unlikely to come to that. I doubt the mercurial Trump has the commitment and concentration it would take to implement a fascist dictatorship, nor that the stropic American public would easily fall into line. Given global risks like climate change, biodiversity loss, and nuclear weapons, I have become rather pessimistic about the future. Nonetheless, my work and activism is guided by a kind of "pragmatic optimism" according to which major disasters can be averted if only we try hard enough. Do you feel optimistic about humanity's future, either in the short or long term? Do you think the "moral Flynn effect"—a term you coined to refer to our

collective moral progress since WWII, driven by "reason" and rising IQs—will continue? I would call the belief that activism can merely avert "major disasters" a form of pessimism! The world has done much better than avert major disasters: we've decimated disease, hunger, and extreme poverty; doubled longevity; multiplied global wealth; made literacy and basic education (including for girls) nearly universal; eliminated war from five sixths of the planet; expanded opportunities for leisure and travel; reduced many forms of pollution and deforestation; and much else. (See here, here, and here for data.) To be sure, some of the challenges facing us are formidable. But like you, I feel pragmatically optimistic. Not in the sense that I can prophesy a good future—only a charlatan would claim to know the future—but in the sense that problems are solvable. Nuclear weapons can be reduced in number, made more secure, and someday eliminated altogether (as Ronald Reagan, Henry Kissinger, Sam Nunn, George Shultz, William Perry, and Barack Obama, among others, have advocated). Climate change can be mitigated by an aggressive combination of policy and technology, as Joshua Goldstein and I have argued, following the lead of the ecomodernist movement. Success is by no means guaranteed, but we must not sit back and sulk, resigned to the corrosive belief that humanity is doomed. As for collective moral progress, I see it as pushed and pulled by two sides of human nature. Dragging us back are atavistic mindsets like zero-sum thinking, authoritarianism, tribalism, dominance, and vengeance, which operate pretty much by default. Pulling us forward are the better angels of our nature like empathy, self-control, and reason, which are energized by the Enlightenment institutions of democracy, science, education, open economies, and a global community. It's impossible to prophesy which forces will prevail at a given time. But data from the World Values Survey suggest that if the world continues to get richer, better educated, and more connected—all steady trends—it will also tend to get more liberal and cosmopolitan. As you are forced to deal with other people who are not like yourself, you are automatically driven to universal values like reason, science, and human flourishing, and away from parochial ones like "My holy books are true" or "Make American great again."

We'll straight turn - cap solves war, several warrants. Prefer because our ev comes from a phd who specializes in the relationship between econ conditions and war

Michael **Mousseau 19**, PhD, studies international politics with a particular focus on the link between economic conditions, institutions, and conflict, 7/29/19, "The End of War: How a Robust Marketplace and Liberal Hegemony Are Leading to Perpetual World Peace," https://www.mitpressjournals.org/doi/full/10.1162/isec_a_00352?mobileUi=0

If my argument is correct, the world is on the cusp of tremendous change: across the globe, contractualism is overtaking status-personalism and, in so doing, launching an era of peace and prosperity. This conclusion is reached without any monotonic or teleological assumptions: anything that collapses the contractualist economies for a generation or two would stop or reverse this trend.⁸¹ All else being equal, the contractualist hegemony has made the odds of unit-level change from a status to a contractualist economy more likely than the reverse. At the start of the twentieth century, only the United States had a contractualist economy; by the end, at least thirty-five states were contractualist.⁸² The Westphalian system has never been as conducive to transitions to contractualist economies as it has been under the contractualist hegemony, which prohibits states from starting wars for booty, debt collection, or territory. Nor has the world ever had such widespread access to capital, mobility, and equity in trade as it has had since the contractualist hegemony made it so with the signing of the Atlantic Charter and the implementation of the Bretton Woods agreements. The number of transitions also predictably increased after the Cold War, when the contractualist hegemony emerged as largely unchallenged. In this way, system change toward contractualist hegemony within the anarchic order, rooted in unit-level change, ultimately promotes more unit-level change toward a contractualist world.

Reports of the Demise of the Liberal Order Are Greatly Exaggerated

I have argued that the liberal global order is on the rise; yet, liberal values around the world seem to be in retreat. In recent years, two contractualist states with populist governments—Hungary and Poland—have begun to embrace anti-immigrant and anti-globalization positions. In the United States, President Donald Trump appears to favor status values such as power, rank, and loyalty over

contractualist values such as equity and respect for the rule of law. In foreign policy, Trump does not seem to share contractualists' opposition to Russia's efforts to sow chaos, and he sees trade in terms of winners and losers.

Reports of the demise of the liberal order, however, are greatly exaggerated. First, Hungary and Poland are newly contractualist states. The sociological nature of economic norms theory means that contractualist values should be more firmly rooted in older contractualist societies than in newer ones. This is corroborated with the natural experiment of Germany: in 1962 West Germany embraced contractualism (see table 1), but it was only after 1991 that East Germany could have become contractualist, when massive investments from the Federal Republic caused incomes in the marketplace to become higher than incomes obtainable from status relationships. Today, Germany's populist movement is concentrated in the eastern part of the country and is largely nonexistent in the western part,⁸³ which corroborates the expectation that some newly contractualist societies retain some of their status values even after a generation of robust opportunity in the marketplace. Deeper changes in values may not occur until generational cohorts initially socialized into status or axial economies have passed on.

Second, the **electorates in most** of the thirty-five contractualist **states** listed in table 1 in 2010 **have not experienced substantial increases in populist sentiment**. Italy's Five Star movement is often called populist but largely because of its anti-immigrant stance. Although an embrace of immigrants would seem consistent with contractualist values, opposition to large numbers of immigrants is arguably a rational response to what is essentially a huge external shock that has intensified in recent years. Britons voted to leave the European Union, but largely because they believed they were being treated unfairly in it. The rejection of unfair terms of trade, whether perceived correctly or not, is consistent with contractualist values.

Third, the **strength of institutions** far **exceeds** that of **any one person**, **including the president** of the United States. Liberal values and institutions are rooted in contractualist economic norms and will not disappear simply because some leaders choose not to abide by them. For instance, although Trump may want the United States to withdraw from the North Atlantic alliance, this is not a view shared by Congress and the American people. Even members of Trump's administration have often restrained him in ways consistent with contractualist values and institutions.⁸⁴

In economic norms theory, the only way the United States' contractualist values could shift to status or axial values would be through radical economic change. As mentioned above, economics is ultimately at the mercy of politics, as an influential coalition of rent-seekers could potentially collapse a contractualist economy by failing to sustain the highly inclusive marketplace or uphold the state's credibility in enforcing of contracts. In recent years, the U.S. economy has begun tilting toward rent-seekers, given the growing role of private money in electoral campaigns and the increasing sophistication of rent-seekers in masking their activities through the manipulation of public opinion, including through their concentrated ownership of media outlets. Such rentierism could precipitate a change in U.S. values if it results in a retraction of the market substantial enough that newer generations began to obtain higher wages in newfound status networks than in the marketplace.

In this way, **the Trump phenomenon** may reflect a pathology in U.S. governing institutions; but at least so far, it arguably **has not extended to the** American **people**. Most of Trump's supporters seem to be drawn to him not for his expressions of status values, but for his pledges to fight a "rigged" system and create well-paying jobs. Whether or not Trump means what he says, many of his supporters saw a vote for him as an act of protest against the increasing corruption occurring in the United States, a clear contractualist expression.⁸⁵ Although a collapse of the U.S. economy and transition to an axial or a status economy is always possible, the feedback loop of popular insistence on economic growth and a highly inclusive marketplace makes this unlikely. Aside from an external shock (such as nuclear war or climate devastation), such a transition could happen only if the rentiers somehow manage to remain in power long enough to institutionalize a permanently underemployed underclass.

Fourth, even if the U.S. economy were to collapse and the United States became an axial or a status power, the combined economic might of all the other contractualist countries in the world is nearly twice that of the United States. The soft power of the United States in world politics lies not in its power to persuade, but in it being the largest of the contractualist states, and in its willingness to provide the public good of global security since the collapse of the pound sterling in late 1946. If the United States withdrew from its leadership role, the remaining contractualist powers would fill the vacuum. None of them has an economy relatively large enough to enable it to act as a natural leader and principal provider of global security, but it is the temperament of

these states that they can easily form an international organization to coordinate and act on their shared security interests, even if some may choose to free ride.

Fifth, current events need to be viewed within a larger context. Fernand Braudel pinpoints the rise of the modern world economy as starting around the year 1450 in northwestern Europe.⁸⁶ The first contractualist economy emerged more than two centuries ago. Since then, contractualist states have confronted numerous shocks and threats to their systems, including the American Civil War, the Great Depression, two world wars, and the Cold War. The present **populist mini-wave** and pathologies in U.S. democracy **are** mere **trifling episodes in a larger historical frame**.

Conclusion

This article has introduced a new liberal theory of global politics and argues that **global alignments are rooted in factors internal to states: status states want expansion and disorder wherever they lack control; contractualist states want universal stability and order based on the principle of self-determination for all states**. As such, global patterns of war, peace, and cooperation can be explained without recourse to such external factors as trade interdependence, international institutions, interstate images, or intersubjective structure; economic norms theory can explain these patterns from states' internal conditions alone. If this argument is correct, then the relative power of states does determine the perception of threat, as realists have long maintained, but with an essential qualification: only among status states. In this way, internal conditions can explain why 2,400 years ago Sparta feared the rising power of Athens, and why today the distribution of power seems to be playing an ever reduced role in global politics.

My analyses of most states from 1946 to 2010 corroborate the prediction of a liberal global hierarchy managed by a natural alliance of states with contractualist economies. **States with contractualist and export-oriented economies tend to agree on issues voted on in the United Nations General Assembly, regardless of their power status or capability, because they have common interests in a global order based on self-determination**. Among states with status and insular economies, in contrast, major powers and those with greater capability are more likely to balance the contractualist hegemony, which they fear. Meanwhile, minor powers and those with less capability are more likely to bandwagon with it, which they fear less than they do the status major powers.

Additionally, **the theory** provides an explanation for a large number of observed facts in international politics. It **can explain the decline of war**. It can explain the United States' enduring soft power, and why its leadership continues utterly unchallenged by other market powers, despite its relative economic decline since the mid-twentieth century. It offers an account for why developing states with weak institutions tend to bandwagon with the Western powers;⁸⁷ and why land powers tend to provoke counterbalancing coalitions, and sea powers, which tend to be trading powers, do not.⁸⁸ It can account for the democratic peace; why democracies tend to win their wars; and why the probability of war among market democracies is practically zero. It can explain how states become prosperous; how democracy consolidates; the tenacity of corruption in developing countries; why Western powers reproach their clients for their corruption;⁸⁹ and why states fail. It can explain global terrorism and anti-Americanism.⁹⁰

If the theory is right, **war is becoming obsolete**, and not for reasons supposed in most international relations theorizing. There is no security dilemma in international politics, as realists contend there is: relative power reliably matters only to leaders of status states, which always consider all other states enemies. Yet, the trajectory of peace is not at all caused by democracy, trade, or international institutions, as liberals maintain. As argued here, democracy, trade, and institutions are epiphenomenal. Contractualist economies are not the only explanation for these factors, but they are a cause of democratic consolidation, foreign policy preferences for equitable trade, and international organization. **Leaders of contractualist states assess threats based not on their images of other states' regime types, economic types, or their capabilities, but on their behavior**.

What economic norms theory cannot explain is the triggering environmental and political origins of economic change. Although the theory predicts systemic effects (contractualist hegemony) on unit-level change (national transitions toward contractualist

economies), it cannot predict when and where leaders of status and axial states might seek to support the market; when and where contractualist economies will emerge; or when and where systemic effects will result in changes in the units. The theory treats economic change largely exogenously.⁹¹

Thus, the theory cannot predict what China will do in the future, because it is impossible to know whether it will become a contractualist power. The theory can predict, however, that conflict with China is not inevitable, and that it can be avoided if the contractualist powers do not confuse China's mercantilist pursuits with incipient revisionism, and if they grasp that China's leadership increasingly has interests in the global market order. If China transitions to a contractualist economy—and such a prospect is likely if current trends continue—the proportion of people in the contractualist mind-set worldwide will more than double, from 16 percent to 35 percent. This would greatly increase the speed of the trajectory toward peace, as long as the planet can ecologically sustain the contractualist economies' high levels of productivity.

Russia, in contrast, is the natural enemy of the contractualist hegemony: its status economy encourages the sowing of chaos anywhere Russia lacks control, putting it in direct opposition to the contractualists' interest in order. Russia has a substantial nuclear arsenal, but this does not diminish the overwhelming might of the contractualist hegemony, because nuclear weapons can be used rationally only to deter attacks. Contractualist states do not attack states to make them contractualist, so Russia's deterrent capability has no effect on the power of this hegemony and the trajectory of peace.

Since the defeat of the Axis powers in 1945, an alliance of contractualist states has sought to impose a global order based on the principle of self-determination—a principle that applies to all states, large and small. This global order is increasing the odds of states transitioning from status to contractualist economies and reducing the odds of reverse transitions. In this way, economic norms theory supports the proposition that the world may be nearing half a millennium of change that began with the rise of axial markets in northwestern Europe around 1450. If the theory is correct, the beginning of the end of this change may have been the emergence of the contractualist hegemony in the mid-twentieth century. This article has argued that no status power could ever overtake the combined might of this hegemony. Thus, barring some dark force that brings about a collapse of the global economy, **the world is now in the endgame of a five-century-long trajectory toward permanent peace and prosperity.**