## 1ar

### T

#### **We meet**

#### **1] Ban literally means to fucking prohibit**

Merriam Webster ND, “Ban”, <https://www.merriam-webster.com/dictionary/ban> DD AG

Definition of ban (Entry 1 of 3)

transitive verb

1: to prohibit especially by legal means

### Xi DA

#### 1] Drop in the bucket – their link evidence is about war based technology – we’ve isolated a specific zone that has nothing to do with military tech – there’s no evidence that the PLA cares enough – there’s just 0 specific link evidence

#### 2] No impact – the PLA has been pissed before – Taiwan, PLA veterans, lack of India invasion all thump – no reason refusing to mine a single entity will be Xi’s downfall.

#### 3] No lashout – China, the CCP and PLA are all super conflict averse – the government is restrained – that’s why conflicts like those in Taiwan will never escalate beyond political tension

#### 4] Timeframe deficit – takes forever to Xi to be thrown out since he’s already deeply entrenched

#### 5] Xi is deeply entrenched – he couldn’t be removed from office if he asked to be – he’s been written into the constitution and has consolidated multiple government positions for himself. B] the PLA has never thrown out a leader – no reason to start now

#### 6] Xi’s going nowhere soon – he has a firm handle on the PLA and the rest of China

Han 21 Lianchao Han, 11-5-2021, "China's Xi Jinping will not give up his power any time soon," TheHill, <https://thehill.com/opinion/international/580115-chinas-xi-jinping-will-not-give-up-his-power-anytime-soon> DD AG

Some China watchers are wondering about the ability of the country’s leader, Xi Jinping, to remain in power. Xi has not left China for almost two years, and there has been discussion of internecine rivalry within the Chinese Communist Party (CCP). The tension most recently appears to be between Xi’s supporters and those of former leader Jiang Zemin, provoking speculation about Xi’s staying power. Also in opposition to Xi are supporters of the late Deng Xiaoping, including Deng’s son, who has signaled his contempt for Xi’s policies. Xi likely is laboring to prevent any attempts to undermine his rule, and fortunately for him, he has history and some formidable means to prevent his overthrow.

While recognizing that the life of a communist leader and his control on power can be a daily struggle, Xi is a clever leader. His acumen has been demonstrated by events that illuminate his continued control of the CCP. Indeed, there is evidence that Xi is not going anywhere anytime soon. First, while power struggles among rivals are typical of communist regimes, there have been no coups d’état by the military. Leaders in communist polities have been by maneuvered out of shared control or forced from power, as Georgy Malenkov was outmaneuvered by Nikita Khrushchev as leader of the Soviet Union in the mid-1950s and then, most notably, Khrushchev’s own eviction in 1964. In China, Hua Guofeng arrested Mao Zedong’s widow in 1976, and Deng wrested control from Hua in 1980. Rivals always exist, but usually are eliminated. Were Xi to be forced out, that would be an extraordinary and peculiar development for the CCP.

Second, the purges of Xi’s “anti-corruption campaign” have weakened his rivals within the CCP and the People’s Liberation Army (PLA).

While control of the PLA is more art than science for CCP leaders, there is no indication that Xi cannot manage any strain between him and the PLA, even as he works to tighten his control over the party and the military. Xi has gained popularity by promoting many generals.

Third, Xi is a strong party chairman, one who has evoked comparisons to Mao and no doubt considers himself to be greater than the “Great Helmsman.” As the party’s most powerful person, Xi’s tools are potent. Within the CCP, and discrete from the “anti-corruption campaign,” he controls organizations such as the party’s disciplinary committees and specialized internal security mechanisms that impose much tighter control over the party’s top echelon. It is impossible for top leaders, retired or current, to socialize; thus, it would be difficult for them to plot a coup. Plotting his overthrow would require absolute trust among the plotters and protection from the labyrinth of formal and ad hoc security forces tasked with detecting and defeating such plots. Xi’s ongoing purge against his rivals within the security apparatus further ensures his protection.

Fourth, Xi’s scythe appears to be cutting a broad swath, beyond party and military leaders. Several high-ranking businessmen, for example, recently have departed their positions in favor of low profiles. Jack Ma, co-founder and former executive chairman of Alibaba Group, left his position two years ago. ByteDance’s Zhang Yiming, creator of TikTok and Douyin, stepped down this month as chairman of the social media group; his departure is in keeping with a crackdown of government oversight of the high technology sector in the Chinese economy. Other leading figures in ByteDance also have departed, as have major figures from Kuaishou, one of ByteDance’s rivals in social media.

#### 7] No impact scenario – China isn’t invading Taiwan

Ullman 21 Harlan Ullman,, 12-20-2021, "Why China won't invade Taiwan and Russia won't attack Ukraine," TheHill, <https://thehill.com/opinion/national-security/586492-why-china-wont-invade-taiwan-and-russia-wont-attack-ukraine> DD AG

The alleged missile gap of the late 1950s and early 1960s turned out to be decisively in America’s favor; Vietnam was never vital to halting non-existent monolithic communism; Saddam Hussein never had weapons of mass destruction; imposing democracy in the greater Middle East was a mirage; and today, intelligence warnings of a Russian assault into Ukraine with 175,000 soldiers, and generals and admirals fretting over a Chinese invasion of Taiwan, exemplify these exaggerations.

Barring a catastrophic blunder, Russia will not attack Ukraine. For the foreseeable future, China lacks the military capability to mount an amphibious operation to seize and occupy Taiwan. Why?

A common thread links Russian President Vladimir Putin with Soviet leaders dating back to Lenin: “active measures.” Active measures have always rested on combinations of military intimidation and non-kinetic, psychological, covert and overt intelligence and disruptive operations. The Soviet Union used them unsuccessfully in trying to assimilate Estonia in 1924. Putin is employing them today.

While predicting exactly what Putin may or may not do is risky, identifying the likely reasons for creating this crisis is less so. First, Putin understands that he has the initiative in dialing up or down the state of the crisis. Second, with interior lines, Putin can maneuver his forces with no restraints other than weather and the primitive state of Russia’s roads and rail. Third, Putin can sustain this military presence at acceptable costs and without exhausting his forces. Fourth, Putin announces his general aims in advance. In July, a 5,000 word missive on Ukraine announced what would follow. Unfortunately, the West neglected to understand that and respond.

Putin wants respect and treatment as a peer. He wants to expand the buffer between NATO and the European Union through Ukraine, Belarus and Moldova. He is applying intimidation to coerce Ukrainian President Volodymyr Zelensky to accommodate Russian demands to cease its western impulses to join NATO that almost certainly never will occur.

Putin is also cleverly leveraging President Biden and other Western leaders to cajole, convince or compel Zelensky to adhere to the Minsk II agreement. And Putin appreciates that Russian public opinion currently is running 60-65 percent in his favor.

Putin fully recognizes the potential calamity of an invasion. Russia could face an insurgency as deadly as Afghanistan’s, with possibly 30,000 or more Russian casualties and devastating negative effects to his standing at home. Denying access to the SWIFT banking system and ending Nordstream II would have dire economic and financial consequences. Further, an attack would almost certainly provoke more defense spending by NATO and increased deployment of forces to this region, disrupting his plans for expanding his buffer.

That China will not invade Taiwan is proven by answering the question of how much force would be needed. No senior official has offered an estimate. History does.

In 1944, the U.S. plan for invading Taiwan, defended by about 30,000 Japanese soldiers, called for more than double the forces that landed at Normandy. Operation Causeway required 400,000 soldiers and Marines and 4,000 ships. It is improbable that China will ever obtain this capability.

## 1AC – Plan

#### Plan – The appropriation of outer space through Keep-Out Zones by private entities should be banned.

#### We’ll defend normal means as the signatories of the OST adding an optional protocol under Article II.

Tronchetti 7[Fabio Tronchetti is a professor at the International Institute of Air and Space Law, Leiden University, The Netherlands, 2007, <https://iislweb.org/docs/Diederiks2007.pdf>, 12-15-2021 amrita]

ARTICLE II OF THE OUTER SPACE TREATY: A MATTER OF DEBATE The legal content of Article II of the Outer Space Treaty is one of the most debated and analysed topic in the field of space law. Indeed, several interpretations have been put forward to explain the meaning of its provisions. Article II states that: “Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means”. **The text of Article II represents** the final point of a process, formally initiated with Resolution 1721, aimed at conferring to outer space the status of res communis omnium, namely a thing open for the **free exploration** and use by all States **without the possibility of being appropriated**. By prohibiting the possibility of making territorial claims over outer space or any part thereof based on use or occupation, Article II **makes clear that** the customary procedures of **i**nternational **law allowing** subjects to obtain **sovereignty rights over un-owed lands**, namely discovery, occupatio and effective possession, **do not apply to** outer **space.** This prohibition was considered by the drafters of the Outer Space Treaty the best guarantee for preserving outer space for peaceful activities only and for stimulating the exploration and use of the space environment in the name of all mankind. What has been the object of controversy among legal scholars is the question of whether both States and private individuals are subjected to the provisions of Article II. Indeed, **while Article II forbids** expressis verbis the national **appropriation by** claims of **sovereignty**, by means of use and occupation or other means of outer space, **it does not** make **a**ny explicit **mention** **to** its **private** appropriation. Relying on this consideration, some authors have argued that the private appropriation of outer space and celestial bodies is allowed. For instance, in 1968 Gorove wrote: “Thus, at present an individual acting on his own behalf or on behalf of another individual or private association or an international organisation could lawfully appropriate any parts of outer space…”6 . The same argument is used today by the enterprises selling extraterrestrial acres. They base their claim to the Moon and other celestial bodies on the consideration that Article II does not explicitly forbid private individuals and enterprises to claim, exploit or appropriate the celestial bodies for profit7 . However, it must be said, that nowadays there is a general consensus on the fact that **both national appropriation and private** property rights **are denied** under the Outer Space Treaty. Several way of reasoning have been advanced to support this view. Sters and Tennen affirm that the argument that Article II does not apply to private entities since they are not expressly mentioned fails for the reason that they do not need to be explicitly listed in Article II to be fully subject to the non-appropriation principle8 . **Private entities are allowed to carry out** space **activities but**, according to Article VI of the Outer Space Treaty, they **must be authorized** to conduct such activities **by the** appropriate **State** of nationality. But if the State is prohibited from engaging in certain conduct, then it lacks the authority to license its nationals or other entities subject to its jurisdiction to engage in that prohibited activity. Jenks argues that “States bear international responsibility for national activities in space; it follows that what is forbidden to a State is not permitted to a chartered company created by a State or to one of its nationals acting as a private adventurer”9 . It has been also suggested that **the prohibition of national** appropriation **implies prohibition of private** appropriation because the latter cannot exist independently from the former10. In order to exist, indeed, private property requires a superior authority to enforce it, be in the form of a State or some other recognised entity. In outer space, however, this practice of State endorsement is forbidden. Should a State recognise or protect the territorial acquisitions of any of its subjects, this would constitute a form of national appropriation in violation of Article II. Moreover, it is possible to use some historical elements to support the argument that both the acquisition of State sovereignty and the creation of private property rights are forbidden by the words of Article II. During the negotiations of the Outer Space Treaty, the Delegate of Belgium affirmed that his delegation “had taken note of the interpretation of the non-appropriation advanced by several delegations-apparently without contradiction-as covering both the establishment of sovereignty and the creation of titles to property in private law”11. The French Delegate stated that: “…there was reason to be satisfied that three basic principles were affirmed, namely: the prohibition of any claim of sovereignty or property rights in space…”12. The fact that the accessions to the Outer Space Treaty were not accompanied by reservations or interpretations of the meaning of Article II, it is an evidence of the fact that this issue was considered to be settled during the negotiation phase. Thus, summing up, we may say that **prohibition of appropriation of outer space** and its parts is a rule which **is valid for both private and public entity**. The theory that private operators are not subject to this rule represents a myth that is not supported by any valid legal argument. Moreover, it can be also added that if any subject was allowed to appropriate parts of outer space, the basic aim of the drafters of the Treaty, namely to prevent a colonial competition in outer space and to create the conditions and premises for an exploration and use of outer space carried out for the benefit of all States, would be betrayed. Therefore, **the need to protect the non-appropriative nature o**f outer **space emerges** in all its relevance.

#### Keep-Out zones are synonymous with safety zones and currently legal.

Newsome 16 [Ted Newsome has a MA from the Institute of Air and Space Law at McGill University, Faculty of Law, August 2016, THE LEGALITY OF SAFETY AND SECURITY ZONES IN OUTER SPACE: A LOOK TO OTHER DOMAINS AND PAST PROPOSAL, <https://escholarship.mcgill.ca/downloads/zp38wg314.pdf>, 03-21-2022 amrita]

1. Safety and Security Zones in Outer Space – Prior Proposals Since the beginning of the space age and most notably during the Cold War, **there have been studies and calls for the establishment of zones in outer space requiring some level of coordination for the passage of space objects within the established zones.**73 **These zones have been described as keep-out zones,** caution zones, safety zones, **security zones**, and self-defense zones. Most zone proposals can be placed in one of two groups. The first group proposes zones be created surrounding critical space assets, while the other group proposes to protect critical space missions by dividing outer space into regions that are fixed relative to Earth and assigned to specific States or groups of States. Both proposals can be described as **“an area of space through which the space objects of other nations could not pass without permission**.”74 Two valuable characteristics of safety and security zones are the elimination of ambiguity and the clarification of motive.75 The success of zones in avoiding collisions and reducing misunderstandings regarding motives would ultimately depend on the lawfulness of such action and the technical means to enforce. This thesis does not attempt to address the technical feasibility of creating or enforcing such zones, because a zone would have different characteristics according to the orbit in which it is established or the space object it is surrounding.76 Although safety and security zones have been studied in the past, the concept has never materialized into practice. Just as the fear of space-based weapons and co-orbital ASATs led to consideration of exclusion zones during the Cold War, the advent of highly maneuverable satellites has resurrected the need to consider the usefulness and lawfulness of such zones. Safety and security zones have been discussed and studied as both a part of a larger “rules of the road” regime and as unilaterally established.77 The present analysis will primarily **address the lawfulness of unilaterally declared security zones**; however, some attention will be given to proposals intended for multilateral STM agreements that include the establishment of zones.

#### Private entities have the jurisdiction to establish KOZs.

Johnson 20 [Matthew Johnson has a Doctor of Philosophy in the Faculty of Arts & Social Sciences from the University of Technology Sydney, 06-29-2020, Mining the High Frontier: Sovereignty, Property and Humankind’s Common Heritage in Outer Space, https://opus.lib.uts.edu.au/bitstream/10453/142380/2/02whole.pdf, 3-21-2022 amrita]

NewSpace promises an ‘opening up’ of the space frontier, yet the pre-emptive legalisation of private appropriation of hitherto common resources points us toward an alternate space future. Assigning private property rights on a first-come, first-served basis would most likely restrict the use of celestial bodies to those with the technical and economic capacity to reach them. Freeland (2017) raises, in hypothetical terms, the possibility that off-world mining could exploit an asteroid **to the point of its non-existence – thereby representing an appropriation of a celestial body in its entirety. The right to be free from ‘harmful interference’ may also herald the effective enclosure** of parts of celestial bodies. In international space law, this term has been understood to mean that when a nation or private operator exercises their right to freely explore and use outer space as per the OST (1967, Art.1), they are obligated to “avoid harmful interference with other spacecraft” (Masson Zwaan & Palkovitz 2017, p.8). Consistent with the Outer Space Treaty and other space law instruments, such as the Constitution of the International Telecommunications Union, the CSLCA recognises the right of space miners to be free from “harmful interference” from other parties – much like satellite broadcasters have the right to be free from harmful radiocommunication interference from other satellite operators (CSLCA 2015, s.51302; OST 1967, Art.9; ITU 1992). **Exercising this right – while still meeting one’s OST obligations to ensure other parties’ freedom of use and exploration – is problematised in the case of space mining** (Perry 2017, pp.15-17). **Tronchetti notes that, “if implemented, the Act could result in the establishment of exclusion/safety zones on the surface of an asteroid so as to protect the activities of US mining companies**” (2015, p.8). The CSLCA could produce scenarios in which access and use of celestial bodies will be prevented for anyone who arrived later – first movers could establish semi-permanent mining infrastructure above a valuable mineral reserve on the Moon or Mars, and then exercise the right to be free of harmful interference. This would effectively ‘fence off’ or enclose surface areas of celestial bodies for the use of space mining firms – analogous to the claiming of ‘land’ – thereby limiting access for other parties and concentrating the benefits of exploitation in the hands of a small cohort of ‘all mankind’.49

#### Public entities are banned from using KOZs—they specifically use the private sector to circumvent.

Storr, 20 (Cait Storr, Chancellor's Postdoctoral Research Fellow, University of Technology Sydney, 6-2-2020, accessed on 3-27-2022, The Conversation, "Could corporations control territory in space? Under new US rules, it might be possible", https://theconversation.com/could-corporations-control-territory-in-space-under-new-us-rules-it-might-be-possible-138939)//phs st

Last weekend, NASA launched US astronauts to the International Space Station for the first time in a decade, in a rocket designed by Elon Musk’s SpaceX. Under President Donald Trump, the US mission to reassert itself as the dominant power in space has rapidly gathered pace. In the process, the US has also begun to reshape international space law to suit its purposes – a move that has many countries concerned. In April, Trump released an executive order restating US support for corporate exploitation of lunar and asteroid resources. The order also rejected a long-held view in international law that space is a global commons and that commercial use of space resources should occur under international oversight. Then, last month, NASA released the “Artemis Accords”, named after its Artemis Program, which aims to return humans to the moon by 2024. The accords claim to establish a common set of principles to govern the civil exploration and use of outer space. What the Artemis Accords would do Although NASA has only released a high-level summary of the accords, two issues for international space law are already clear. First, the Artemis Accords go beyond simply rejecting the unpopular 1979 Moon Agreement, which declared lunar resources to be the “common heritage of mankind” and committed parties to establish an international regime to oversee space mining. Only 18 countries have signed the treaty. In its place, the accords envisage a US-centric framework of bilateral agreements in which “partner nations” agree to follow US-drafted rules. Second, the accords introduce the concept of “safety zones” around lunar operations. Although territorial claims in space are prohibited under international law, these safety zones would seek to protect commercial and scientific sites from inadvertent collisions and other forms of “harmful interference”. What kinds of conduct could count as harmful interference remains to be determined. The accords claim to comply with the 1967 Outer Space Treaty, a widely supported agreement that declared space the “province of all mankind” and permitted commercial resource exploitation as a “peaceful use” of space. However, in practice, the accords have the potential to challenge the Outer Space Treaty’s ban on territorial claims in space. They could also intensify international conflict over space resources.

## 1AC – Advantage—Ilaw

#### That decks international law – three warrants –

#### **1 -- OST – Zones are in direct violation of it.**

Cerny et al., 20 (David Bernstein, Michael B. Cerny, Brandom W. Kelley, and Raphael J. Piliero, Corresponding author: Brandon W. Kelley, Associate Director of Debateat Georgetown University. Center for Security Studies, Georgetown School ofForeign Service, June 2020, accessed on 3-27-2022, Npolicy, "Space and Missile Wars: What Awaits – NPEC", https://npolicy.org/space-and-missile-wars-what-awaits/)//phs st

Keep-Out Zones Proposals to establish KOZs, which restrict close approaches by declaring zones around sensitive space assets in which unauthorized entry into or passage through which may be met with military force, are in clear violation of both the ‘free access’ and ‘non-appropriation’ principles. In its initial proposal, the OTA acknowledged that the ‘free access’ and ‘non-appropriation’ principles presented the primary barrier to KOZs, because they would constitute the appropriation of outer space to defend against anti-satellite weapons. The OTA’s counterargument to this criticism was that the allocation of the geosynchronous orbital slots by the ITU "already incorporates a variation of the ‘keep-out zone’ principle," because satellites must be placed several angular degrees apart to avoid interference, and, that this "precludes the placement of other satellites near its position in the orbital arc."364 However, there are a variety reasons as to why the ITU does not provide legal precedent for KOZs. By way of background, the allocation of orbital slots by the ITU originates from the designation of geostationary orbit along the equator as a "limited natural resource" in Article 33 of the International Telecommunication Convention (ITC) due to limited orbits available and concerns about radio frequency interference between satellites. As a result, the International Telecommunication Union assumed responsibility for the allocation of orbital slots to spacefaring nations to reduce radio frequency interference.365 It is firmly established that the allocation of orbital slots by the ITU does not constitute a violation of the ‘free access’ or ‘non-appropriation’ principles of the OST. First, although orbital slots do, in effect, create a zone in which no state (other than the state to which the slot is allocated) can place geosynchronous satellite, the ITU does not limit a state’s the ‘free access’ to an orbital slot. Rather, all states are afforded freedom of access on a "first come, first served" basis and are not granted any proprietary rights over the orbital slot.366 Although states are unable to place satellites in orbital slots not specifically allocated to them by the ITU, there is absolutely nothing that permits a state from preventing infringement through the use of force. As a result, there is no practical equivalence between orbital slots and KOZs as proposed by the OTA. Second is the nature of the actor involved. Unequivocally, Article II prohibits the ‘national appropriation’ of outer space, such as by nations including the United States and Russia. In the case of the OTA’s proposal, it suggests that the United States unilaterally declare KOZs surrounding United States space assets or negotiate these zones through a treaty. 367 Consequently, to analogize the United States to the ITU in this context is incorrect. As an international organization, the ITU is meaningfully distinct from a nation.368 Although some have argued that the "process of allocating orbital space and excluding nations from particular slots seems to be an obvious case of appropriation," the ITU has broad international character and preserves "access for all space actors, current or future."369 This fact explains why the ITU has never been abolished or restricted from its activities allocating orbital slots.370 Next is the question of what constitutes ‘appropriation.’ In Stephen Gorove’s article, Major Legal Issues Arising from the Use of the Geostationary Orbit, Gorove defines "appropriation" as "the taking of property for one’s own or exclusive use with a sense of permanence."371 Gorove further writes that— "While a state may certainly exercise exclusive control over a traditional object, such as a ship, or an aircraft, or a part of airspace, it is not clear that a satellite in geostationary orbit would be able to maintain its exact position and occupy the same area over a period of time. Even if a position could be accurately maintained, and thus possibly constitute an "appropriation" within the meaning of article II, the satellite would have to be kept in that orbit with a "sense of permanence" and not on a temporary basis."372 This demonstrates two reasons as to why KOZs and orbital slots are meaningfully distinct. First, all states are afforded freedom of access to an orbital slot on a "first come, first served" basis and are not granted any proprietary rights over the orbital slot— they are, both legally and in effect, impermanent.373 Second, the categorization of geostationary orbit as a "limited natural resource" in Article 33 of the International Telecommunication Convention (ITC) shields orbital slot allocation from claims of ‘appropriation’ by the ITU.374 Authority on this question can be found in the International Law Association’s Report of the Fifty-Fourth Conference 427 (1970), along with the United Nations Committee on the Peaceful Uses of Outer Space, which have suggested that ‘appropriation’ does not apply to natural resources.375 Although KOZ proponents do not advocate that states claim sovereignty over the zones themselves, and therefore meet the "by claim of sovereignty" qualification in Article II, this does not elide Article II’s limitation on appropriation by "means of use or occupation."376 This is perhaps the most clear indication of KOZs illegality under the OST, because the basis for limiting another state’s ‘free access’ to the zone itself is its ‘use’ by a state’s satellite. For example, the basis for the OTA’s argument about the legality of ‘keep-out zones’ rests on the notion that, based upon ITU regulations, "geosynchronous [orbits] must be space several degrees apart in order to avoid frequency interference. Therefore, such a satellite precludes the placement of other satellites near its position in the orbital arc."377 In other words, the usage of the orbital slot precludes its access and usage by another state. As we have already established, the ITU is exempt from Article II in the context of geosynchronous orbit. However, for a state to declare a ‘keep-out’ zone on the basis that it preserves national security, as Blau and Gore propose, this would certainly constitute national appropriation "by use" according to the text of Article II.378 Other proponents of KOZs note that precedent exists in the four-kilometer "nominal approach" zone and 200-meter protective "’keepout’ zone" around the International Space Station (ISS).379 Unlike KOZs, however, the zones around the ISS do not permit any state to enforce the zone, prevent entry, or invoke the right to self-defense. Furthermore, states aboard the ISS have not claimed sovereignty over the area or sought to exclude other states from entering the area.380 Instead, the zones around the ISS are "guidelines that are used to assess whether the threat of such a close pass is sufficient to warrant evasive action or other precautions to ensure the safety of the crew."381 As a result, these zones, much like warning zones, can be interpreted as an information-gathering mechanism as opposed to an exclusive measure to allow the invocation of self-defense.

#### **2 -- Artemis Accords – The** acceptance and normalization of safety zones degrades international law.

**Nelson 20** [Jack Wright Nelson, 12-10-2020, "The Artemis Accords and the Future of International Space Law," American Society of International Law, <https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law>] [pT]

Regarding space activities deconfliction, the Accords provide detailed guidance on the establishment and operation of "safety zones" around lunar installations.[[17]](https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law#_edn17) Safety zones are buffer areas in which lunar activities would be subject to specific notification and coordination procedures in order to reduce the risk of collisions or interference. However, carving out or otherwise demarcating portions of the lunar surface—whether required for lunar heritage protection, space resource extraction, or safety zones—may face legal hurdles. First, dividing up the lunar surface could breach the fundamental principle of non-appropriation of celestial bodies. Article II of the Outer Space Treaty provides that: [o]uter space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means. Second, a divided lunar surface could prevent states from exercising their exploration, use, and free access rights. Article I, paragraph 2 of the Outer Space Treaty provides that: [o]uter space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies. Of course, merely signing the Accords does not breach either of these articles, and the Accords consistently stress the importance of multilateralism when addressing lunar heritage protection, space resource extraction, and safety zones.[[18]](https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law#_edn18) Nonetheless, actually implementing the Accords on the lunar surface will require careful compliance management and messaging. Issues may also arise regarding the Moon Agreement. The United States has neither signed nor ratified the Moon Agreement. By Executive Order, President Trump expressly repudiated that the Moon Agreement reflects customary international law.[[19]](https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law#_edn19) But one signatory to the Accords—Australia—has also ratified the Moon Agreement. It is unclear whether the Moon Agreement can coexist with the Accords. The former declares that the Moon "and its natural resources are the common heritage of mankind,"[[20]](https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law#_edn20) and commits its parties to establish an international regime to govern space resource extraction."[[21]](https://www.asil.org/insights/volume/24/issue/31/artemis-accords-and-future-international-space-law#_edn21) Both concepts are absent from the Accords. Further problems may arise concerning the Accords' endorsement of lunar heritage protection and safety zones—both generally entail the prolonged or even indefinite occupation of the lunar surface below and around equipment or installations on the Moon. Yet Article XI, paragraph 3 of the Moon Agreement specifically states that: [t]he placement of personnel, space vehicles, equipment, facilities, stations and installations on or below the surface of the Moon … shall not create a right of ownership over the surface or subsurface of the Moon or any areas thereof. Whether a prolonged or indefinite occupation would amount to ownership is debatable. But Australia will need to closely review its Moon Agreement obligations for compatibility with the Accords on an ongoing basis. If intractable conflicts occur, Australia may need to withdraw.

#### **3 -- Tensions – KOZs are unilaterally dictated by countries like the US which encourages a new interpretation of international law.**

**Stirn 20** [Alexander Stirn, 11-12-2020, "Do NASA’s Lunar Exploration Rules Violate Space Law?," Scientific American, <https://www.scientificamerican.com/article/do-nasas-lunar-exploration-rules-violate-space-law/>] [pT]

The Artemis Accords document seems to take a different approach, as evinced in Section 11, which is by far the lengthiest section. Under the innocuous-sounding title “Deconfliction of Space Activities,” it states that the countries subject to the agreements will support the development of safety zones, for example around a moon base or where mining activities occur. This is meant to ensure that states do not come into conflict with one another. At the IAC, Bridenstine maintained “that we can, in fact, extract and utilize space resources. Countries and companies should be able to enjoy the fruits of their labor.” But this is where the problems begin. “Safety zones are specific areas,” Hobe says, “and it is precisely the acquisition of such areas that is, in fact, banned by the Outer Space Treaty.” Speaking at the IAC, Frans von der Dunk, a professor of space law at the University of Nebraska–Lincoln, made it clear that although states may plant their flag on the moon, per the Outer Space Treaty, they may not annex regions nor reserve them for future settlement. A Space Law Loophole So are the accords a clear violation of international law? Not necessarily. Their stated purpose “is to establish a common vision via a practical set of principles, guidelines, and best practices.” That is, they do not claim to form the basis for new law and thus, strictly speaking, cannot violate existing international law. “We already have internationally binding law,” Hobe says. “But there are a few countries that are not satisfied with the interpretation of this law. So they create guidelines with the hope that eventually they will develop into customary law that will weaken the existing space law. That’s a really clever maneuver.” Von der Dunk also views the Artemis Accords as more of a political problem than a legal one. The agreements’ sizable list of signatory nations, he says, is meant to signal a broad international consensus that the U.S. is correct in its interpretation of the Outer Space Treaty with regard to the exploitation of the moon. But Hobe, an expert in international law, notes that such consensus may be illusory, based on the way in which the agreements were developed. There was no international committee and no broad discussion. Instead the Artemis Accords were simply dictated by the U.S. “The Americans always want to lay down the rules of the game. Only then may many other countries be asked to cooperate,” Hobe says. “And it is very important to them to quickly create facts on the ground.” It is the old game of strength in numbers: the more states that are a signatory to an agreement, the harder it is to turn back the wheel. “We are of the opinion that all of the countries that participate are complicit in hollowing out the Outer Space Treaty,” he adds.

#### Reverse causal-- the OST is weak because of the lack of enforcement, but regulating violations gives it legitimacy.

Ishola et al., 2021 (Feyisola Ruth Ishola, Oluwabusola Fadipe, and Olaoluwa Colin Taiwo, Department of Private Law and Jurisprudence, School of Law and Security Studies, Babcock University, Ilishan-Remo, Nigeria., Address correspondence to: Oluwabusola Fadipe, Department of Political Science, Public Administration, and International Law and Diplomacy, Babcock University, Ilishan-Remo 121103, Nigeria, Department of Private Law and Jurisprudence, School of Law and Security Studies, Babcock University, Ilishan-Remo, Nigeria., 3-19-2021, accessed on 3-27-2022, New Space, "Legal Enforceability of International Space Laws: An Appraisal of 1967 Outer Space Treaty | New Space", https://www.liebertpub.com/doi/full/10.1089/space.2020.0038)//phs st

* Not sure how good this is given that it’s not KOZ specific but it says at the end that accountability for violations is k2 the OST getting cred so declaring that it is bad thru this specific solvency method might help cred?
* I’m worried about adv cps that can solve this
* Or alt causes like asteroid mining

Amendment to 1967 Outer Space Treaty As earlier examined, the 1967 Outer Space Treaty provided general principles to govern space activities of states: mandating peaceful uses of the outer space. As the first body of law for regulating space activities, it provided a legal framework for space exploration for the benefit of all states. A primary failure of this treaty is the lack of enforceability, that is, the provisions of the treaty are not legally enforceable, thus technically nonbinding on state parties. The 1967 Outer Space Treaty relies on the ancient principle of international law, “pacta sunt servanda,” which states that agreements must be kept by state (referring to Article 26 of Vienna Convention on the Law of Treaties, 1968).9 This general principle of international law places a responsibility on state to comply with treaty agreements as well as fulfill responsibilities arising from this obligation. However, law is not law without procedures to enforce compliance and/or sanctions for violations that makes the treaty a mere recommendation to state parties. This article proposes an amendment to the 1967 Outer Space Treaty as the parent law on the use of outer space. In rectifying the aforementioned problem, there is a need to create a procedural system for legal enforcement under the existing framework. Thus, our proposition relies on the inclusion of an Additional Protocol to the 1967 Outer Space Treaty, giving powers to the UNCOPUOS to function in quasi-judicial capacity. Under the current UN system, the International Court of Justice (ICJ) has the sole responsibility of resolving legal disputes as well as providing advisory on international legal questions. However, with the complexity of international politics and the challenges posed by continuous exploration of space resources as it relates specifically to environmental protection and sustainability, the need for an institutional regime cannot be ignored. The international space legal instruments are designed under the auspices of the UNCOPUOS; however, none of the treaties made mention of the committee in its content. As a result, UNCOPUOS continues to function as a mere international forum with no enforcement powers. Although UNCOPUOS at creation was “set up by the UN General Assembly to govern the exploration and use of space for the benefit of all humanity,” the committee currently functions as an international forum with merely administrative powers. This has seen the birth of 5 treaties alongside series of research and documentation on development in space technology. However, without ability to enforce provisions set out in the treaty, it will be seemingly impossible to deliver on this mandate especially with sovereign powers of states and the pursuit of national interest to establish scientific and technological advancement in the outer space. The amended functions of UNCOPUOS under the proposed Additional Protocol will consist of special legal powers that include but are not limited to: 1. Determination of remedies and sanctions due for breach of provisions of the 1967 Outer Space Treaty, extending to other 4 treaties namely: The Rescue Agreement; Convention on International Liability for Damage Caused by Space Objects; Convention on Registration of Objects Launched into Outer Space, and Agreement Governing the Activities of States on the Moon and Other Celestial Bodies. 2. Provision of adjudicatory procedures for the determination of appropriate sanctions for different category of violation of space laws. 3. Liaising with UN Security Council to enforce decisions of the committee on erring state parties using various instruments. 4. Amendment of existing legal framework to suit new realities and developments in space exploration. In addition, the legal subcommittee of UNCOPUOS shall have exclusive tribunal status to carry out the mentioned functions that shall exist to enforce provisions of the Outer Space Treaty. Adlai Stevenson10 while addressing the UN General Assembly in 1963 explained, Article 38 of the ICJ Statute clearly defines the legal status of UN General Assembly Resolutions that to a large extent represent a consensus of opinion by states on a particular matter and may not have any binding force because resolutions do not establish rules of law. Therefore, states determine their adherence to treaties or the resolutions and declarations that produce them on the floor of the UN.11 For instance, Article VI of the 1967 Outer Space Treaty clearly states that “States shall be responsible for damage or injury caused by the launching or attempted launching into outer space of objects” but does not specify the legal procedure for adjudicating or determining damages with spelt out sanctions. Furthermore, for a proper functioning of space laws, UNCOPUOS must reserve extraterritorial jurisdiction, serving as the international space tribunal for enforcing provisions codified in space treaties. The Additional Protocol as proposed should include a provision for decisions reached by UNCOPUOS legal subcommittee to be documented at the ICJ. Also, municipal courts of competent jurisdiction of the parties concerned must enforce these decisions or awards within 60 days after which the UN Security Council will take actions ranging from trade embargo, diplomatic boycott, and so on to enforce compliance. It is highly essential for the Security Council to become involved in the enforcement process being the most powerful organ in the UN system but much more for the fact that unchecked space exploration could jeopardize global peace and security in the long run. We must begin to rethink the extent sovereign immunity influences critical global issues such as the use of outer space especially where there are far reaching consequences that can put the world in a dismal state. Laws exist to regulate human behavior, international laws to regulate state actions delineating legal boundaries where necessary but without enforceability, laws are nothing but “a toothless dog who can only bark but never bite.” A justification for granting UNCOPUOS quasi-judicial status as an extraterritorial entity is found in Article 104 of the UN Charter that states, “the organization (United Nations) shall enjoy in the territory of each of its Members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.” Thus, UNCOPUOS as a committee under the broad UN structure in this case can equally benefit from this clause to achieve its goals. Although Article 92 of the UN Charter states that “the ICJ shall be the principal judicial organ of the United Nations,” the complexity of space activities require a special legal institution of which the UNCOPUOS is a ready fit since it was intentionally created “to govern the exploration and use of outer space.” Accountability in International Space Governance According to Matignon,12 “Responsibility is the corollary of international law, the best proof of its existence and the most credible measure of its effectiveness.” The structure of international space governance relies on 2 legal principles: responsibility and liability. Article VI of the 1967 Outer Space Treaty speaks of the international responsibility of states to conform to the provisions of the treaty in their national activities in the outer space. In contrast, Article VII of the same treaty relates to the liability of states for damage in the cause of outer space exploration. The “Principle of State Responsibility” is a fundamental notion governing when and how a state is held responsible for violating an obligation under international law. In essence, states have the responsibility to comply with laid down principles as well as ensure compliance. The major question then is who monitors compliance? What are the penalties for noncompliance? States as sovereign entities often enjoy sovereign immunity from prosecution or international legal actions. In addition, states are driven by national aspirations and interests. It has become increasingly important to hold states accountable for activities in the outer space. Kealotswe-Matlou13 had earlier proposed a World Outer Space Authority to provide an alternative platform where binding decisions can be made by majority vote versus consensus to ensure enforcement of the rule of law in outer space. According to Kealotswe-Matlou,13 “It may be in the best interests of the international community to start negotiations on establishing an organization or unified structure equipped with decision making powers…” In addition, the World Outer Space Authority as proposed by Kealotswe-Matlou is essential to consolidate efforts for developing an international legal mechanism capable of enforcing states responsibility in outer space. Alternatively, there is a great possibility of maintaining accountability of states in outer space through organized regional organizations. Regional organizations are established by mutual interests of parties under an institutional arrangement.14 There is often a common purpose as opposed to a broad international framework like the UN where some parties might feel subjugated. To this end, it is highly essential for regional bodies such as the European Union and African Union to begin to supervise activities of member states in outer space for accountability. Bearing in mind that it is nearly impossible to police the activities of states in the outer space, a regional accountability framework could serve as a bride to UNCOPOUS in monitoring activities of states. As a matter of fact, under a regional arrangement, states are likely to hold each other accountable to protect their interests that may be threatened by another's activity in the outer space. Summarily, “efforts to structure space governance by creating soft laws commendable as they may be, do nothing to dispense of the fact that non-binding decisions and resolutions are not capable of enforcing the rule of law…this underscores the need to intensify international exchanges and cooperation in the governance of outer space on the basis of security and stability and peaceful uses.”14 Conclusion In conclusion, challenges arising in international space governance are not due to the absence of laws but due to lack of enforceability procedures for existing laws that could often result to noncompliance by state parties. This has, therefore, necessitated the need for a stricter institutional regime with competent jurisdiction and expert knowledge to drive the enforcement of international treaties as well as resolve ambiguities therein. We believe this recommendation is sufficient to keep states responsible and accountable in the exploration of space resources because “consequence is the strongest modifier of behavior.”15

#### That’s key to preventing conflict both on Earth and in space.

**Corinaldesi 21** [Gianluca Corinaldesi, 7-7-2021, "Why We Need International Norms to Regulate the Space Race," No Publication, <https://today.duke.edu/2021/07/why-we-need-international-norms-regulate-space-race>] [pT]

With the proliferation of human activity in space, humanity risks repeating the mistakes that saw unbridled competition over scarce resources lead to wars, former U.S. Ambassador W. Robert Pearson told a Duke panel on space diplomacy. A growing number of national and private actors are staking a claim on resources that need to operate within a more robust regulatory framework, according to the panel. The event, co-sponsored by Duke in DC, was the first in a new series on space diplomacy organized by the DUCIGS Rethinking Diplomacy program. Whether this unmanaged competition will lead to future conflicts or to an agreed set of international norms will depend on how quickly diplomacy is able to gather enough consensus, panelists said. At the event, astrophysicist Benjamin Schmitt said current norms are lacking. The Outer Space Treaty of 1967 doesn’t cover many of the elements of the commercial activity of private enterprises or conventional weapons in space, among other issues, Schmitt said. UNC Asheville’s astronomer Prof. Britt Lundgren moderated the event with Schmitt and Pearson, both fellows of the DUCIGS/Rethinking Diplomacy Program. Pearson said three truths from the European age of global exploration from the 15th century offer lessons for regulating space exploration today: Those countries with access to the new territory became substantial players in global affairs over the next 500 years; conflicts in the new territories did not remain there, but reverberated to come back to produce wars at home; and private enterprise played an enormous role in shaping trade and international relations realities. “Now as then,” he said, “unmanaged competition can easily lead to conflict.” The unprecedented escalation of activities, players, and deployment of technologies in lower earth orbit and deeper space “upend the order that we have seen since the end of the Apollo program,” said Benjamin Schmitt, a postdoctoral research fellow and project development scientist at the Harvard-Smithsonian Center for Astrophysics. This expanding space race features both commercial companies investing in space projects — Elon Musk’s Space X, for one — and nation-state programs like the U.S.-led Artemis Accords. This alliance of Western-leaning countries plans to bring humans back to the moon by 2024. It also aims to set regulatory norms that recognize the right of private companies to profit from space resources. Russia and China have announced plans to pursue a competing space program. “This is going to put to the test the international agreements written way back — including the moon agreement of the late ‘70s--that really haven't been put to the test in a real, meaningful way because there has been no human activity on the moon to test it,” Schmitt added. International agreements and treaties take time, Pearson said, easily a decade or more, and in the meantime we need a set of norms of behavior to address the most urgent issues in space, such as preventing the accumulation of orbiting debris from spacecraft parts or defunct satellites posing risk of collisions both in space and on earth (as discussed by Schmitt and Pearson in a [recent article in Foreign Policy](https://foreignpolicy.com/2021/05/15/space-junk-rocket-debris-long-march-starlink-elon-musk-moon-asteroids-travel-militarization-resource-competition/)). Setting rules and best practices on such issues “would create what we call ‘transparent and confidence-building measures’ that might help frame the norms of behavior that would guide us,” Pearson said. Among the emerging issues that the Outer Space Treaty of 1967 — essentially an arms control treaty — did not cover is the placement or use of non-nuclear weapons in space. NATO may be helping to set the stage for productive talks in three ways: NATO’s space policy states that the Alliance “has no intention to put weapons in space”; it includes space within its defense and deterrence doctrine, placing the issue clearly in the political realm; and it offers the prospect for a collective of NATO, the EU, Japan, South Korea and Australia to take the lead in setting new approaches to space issues. Such an effort could help potentially build consensus at the U.N. level and spearhead new space laws and regulations.

#### Space wars go nuclear

Grego 18 – Laura, Senior Scientist in the Global Security Program at the Union of Concerned Scientists, Postdoctoral Researcher at the Harvard-Smithsonian Center for Astrophysics, PhD in Experimental Physics at the California Institute of Technology, Space and Crisis Stability, Union of Concerned Scientists, 3-19-18, <https://www.law.upenn.edu/live/files/7804-grego-space-and-crisis-stabilitypdf>

Why space is a particular problem for crisis stability For a number of reasons, space poses particular challenges in preventing a crisis from starting or from being managed well. Some of these are to do with the physical nature of space, such as the short timelines and difficulty of attribution inherent in space operations. Some are due to the way space is used, such as the entanglement of strategic and tactical missions and the prevalence of dual-use technologies. Some are due to the history of space, such the absence of a shared understanding of appropriate behaviors and consequences, and a dearth of stabilizing personal and institutional relationships. While some of these have terrestrial equivalents, taken together, they present a special challenge. The vulnerability of satellites and first strike incentives Satellites are inherently fragile and difficult to protect; in the language of strategic planners, space is an “offense-dominant” regime. This can lead to a number of pressures to strike first that don‘t exist for other, better-protected domains. Satellites travel on predictable orbits, and many pass repeatedly over all of the earth‘s nations. Low-earth orbiting satellites are reachable by missiles much less capable than those needed to launch satellites into orbit, as well as by directed energy which can interfere with sensors or with communications channels. Because launch mass is at a premium, satellite armor is impractical. Maneuvers on orbit need costly amounts of fuel, which has to be brought along on launch, limiting satellites‘ ability to move away from threats. And so, these very valuable satellites are also inherently vulnerable and may present as attractive targets. Thus, an actor with substantial dependence on space has an incentive to strike first if hostilities look probable, to ensure these valuable assets are not lost. Even if both (or all) sides in a conflict prefer not to engage in war, this weakness may provide an incentive to approach it closely anyway. A RAND Corporation monograph commissioned by the Air Force15 described the issue this way: First-strike stability is a concept that Glenn Kent and David Thaler developed in 1989 to examine the structural dynamics of mutual deterrence between two or more nuclear states.16 It is similar to crisis stability, which Charles Glaser described as ―a measure of the countries‘ incentives not to preempt in a crisis, that is, not to attack first in order to beat the attack of the enemy,‖17 except that it does not delve into the psychological factors present in specific crises. Rather, first strike stability focuses on each side‘s force posture and the balance of capabilities and vulnerabilities that could make a crisis unstable should a confrontation occur. For example, in the case of the United States, the fact that conventional weapons are so heavily dependent on vulnerable satellites may create incentives for the US to strike first terrestrially in the lead up to a confrontation, before its space-derived advantages are eroded by anti-satellite attacks.18 Indeed, any actor for which satellites or space-based weapons are an important part of its military posture, whether for support missions or on-orbit weapons, will feel “use it or lose it” pressure because of the inherent vulnerability of satellites. Short timelines and difficulty of attribution The compressed timelines characteristic of crises combine with these “use it or lose it” pressures to shrink timelines. This dynamic couples dangerously with the inherent difficulty of determining the causes of satellite degradation, whether malicious or from natural causes, in a timely way. Space is a difficult environment in which to operate. Satellites orbit amidst increasing amounts of debris. A collision with a debris object the size of a marble could be catastrophic for a satellite, but objects of that size cannot be reliably tracked. So a failure due to a collision with a small piece of untracked debris may be left open to other interpretations. Satellite electronics are also subject to high levels of damaging radiation. Because of their remoteness, satellites as a rule cannot be repaired or maintained. While on-board diagnostics and space surveillance can help the user understand what went wrong, it is difficult to have a complete picture on short timescales. Satellite failure on-orbit is a regular occurrence19 (indeed, many satellites are kept in service long past their intended lifetimes). In the past, when fewer actors had access to satellite-disrupting technologies, satellite failures were usually ascribed to “natural” causes. But increasingly, even during times of peace operators may assume malicious intent. More to the point, in a crisis when the costs of inaction may be perceived to be costly, there is an incentive to choose the worst-case interpretation of events even if the information is incomplete or inconclusive. Entanglement of strategic and tactical missions During the Cold War, nuclear and conventional arms were well separated, and escalation pathways were relatively clear. While space-based assets performed critical strategic missions, including early warning of ballistic missile launch and secure communications in a crisis, there was a relatively clear sense that these targets were off limits, as attacks could undermine nuclear deterrence. In the Strategic Arms Limitation Treaty, the US and Soviet Union pledged not to interfere with each other‘s ―national technical means‖ of verifying compliance with the agreement, yet another recognition that attacking strategically important satellites could be destabilizing.20 There was also restraint in building the hardware that could hold these assets at risk. However, where the lines between strategic satellite missions and other missions are blurred, these norms can be weakened. For example, the satellites that provide early warning of ballistic missile launch are associated with nuclear deterrent posture, but also are critical sensors for missile defenses. Strategic surveillance and missile warning satellites also support efforts to locate and destroy mobile conventional missile launchers. Interfering with an early warning sensor satellite might be intended to dissuade an adversary from using nuclear weapons first by degrading their missile defenses and thus hindering their first-strike posture. However, for a state that uses early warning satellites to enable a “hair trigger” or launch-on-attack posture, the interference with such a satellite might instead be interpreted as a precursor to a nuclear attack. It may accelerate the use of nuclear weapons rather than inhibit it. Misperception and dual-use technologies Some space technologies and activities can be used both for relatively benign purposes but also for hostile ones. It may be difficult for an actor to understand the intent behind the development, testing, use, and stockpiling of these technologies, and see threats where there are none. (Or miss a threat until it is too late.) This may start a cycle of action and reaction based on misperception. For example, relatively low-mass satellites can now maneuver autonomously and closely approach other satellites without their cooperation; this may be for peaceful purposes such as satellite maintenance or the building of complex space structures, or for more controversial reasons such as intelligence-gathering or anti-satellite attacks. Ground-based lasers can be used to dazzle the sensors of an adversary‘s remote sensing satellites, and with sufficient power, they may damage those sensors. The power needed to dazzle a satellite is low, achievable with commercially available lasers coupled to a mirror which can track the satellite. Laser ranging networks use low-powered lasers to track satellites and to monitor precisely the Earth‘s shape and gravitational field, and use similar technologies. 21 Higher-powered lasers coupled with satellite-tracking optics have fewer legitimate uses. Because midcourse missile defense systems are intended to destroy long-range ballistic missile warheads, which travel at speeds and altitudes comparable to those of satellites, such defense systems also have inherent ASAT capabilities. In fact, while the technologies being developed for long-range missile defenses might not prove very effective against ballistic missiles—for example, because of the countermeasure problems associated with midcourse missile defense— they could be far more effective against satellites. This capacity is not just theoretical. In 2007, China demonstrated a direct-ascent anti-satellite capability which could be used both in an ASAT and missile defense role, and in 2009, the United States used a ship-based missile defense interceptor to destroy a satellite, as well. US plans indicated a projected inventory of missile defense interceptors with capability to reach all low earth orbiting satellites in the dozens in the 2020s, and in the hundreds by 2030.22 Discrimination The consequences of interfering with a satellite may be vastly different depending on who is affected and how, and whether the satellite represents a legitimate military objective. However, it will not always be clear who the owners and operators of a satellite are, and users of a satellite‘s services may be numerous and not public. Registration of satellites is incomplete23 and current ownership is not necessarily updated in a readily available repository. The identification of a satellite as military or civilian may be deliberately obscured. Or its value as a military asset may change over time; for example, the share of capacity of a commercial satellite used by military customers may wax and wane. A potential adversary‘s satellite may have different or additional missions that are more vital to that adversary than an outsider may perceive. An ASAT attack that creates persistent debris could result in significant collateral damage to a wide range of other actors; unlike terrestrial attacks, these consequences are not limited geographically, and could harm other users unpredictably. In 2015, the Pentagon‘s annual wargame**,** or simulated conflict, involving space assets focused on a future regional conflict. The official report out24warnedthatit was hard to keep the conflict contained geographically when using anti-satellite weapons: As the wargame unfolded, a regional crisis quickly escalated, partly because of the interconnectedness of a multi-domain fight involving a capable adversary. The wargame participants emphasized the challenges in containing horizontal escalation once space control capabilities are employedto achieve limited national objectives. Lack of shared understanding of consequences/proportionalityStates havefairly similar understandings of the implications of military actions on the ground, in the air, and at sea,built over decades of experience. The United States and the Soviet Union/Russia have built some shared understanding of each other‘s strategic thinking on nuclear weapons, though this is less true for other states with nuclear weapons. But in the context of nuclear weapons, there is an arguable understanding about the crisis escalation based on the type of weapon (strategic or tactical) and the target (counterforce—against other nuclear targets, or countervalue—against civilian targets). Because of a lack of experience in hostilities that target space-based capabilities, it is not entirely clear what the proper response to a space activity is and where the escalation thresholds or “red lines” lie. Exacerbating this is the asymmetry in space investments; not all actors will assign the same value to a given target or same escalatory nature to different weapons.

#### Nuclear war causes extinction.

Starr ’17 (Steven; director of the University of Missouri’s Clinical Laboratory Science Program, senior scientist at the Physicians for Social Responsibility, Associate member of the Nuclear Age Peace Foundation, expert in the environmental consequences of nuclear war; 1/9/17; “Turning a Blind Eye Towards Armageddon — U.S. Leaders Reject Nuclear Winter Studies”; <https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies/>; Federation of American Scientists; accessed 11/24/18; TV) [AV]

The detonation of an atomic bomb with this explosive power will **instantly ignite fires** over a surface area of three to five square miles. In the recent studies, the scientists calculated that the **blast**, **fire**, and **radiation** from a war fought with 100 atomic bombs could produce **direct fatalities** comparable to all of those worldwide in World War II, or to those once estimated for a “**counterforce**” **nuclear war** between the superpowers. However, the **long-term environmental effects** of the war **could** significantly disrupt the global weather for at least a decade, which would likely **result in** a vast **global famine**. The scientists predicted that **nuclear firestorms** in the burning cities would cause at least five million tons of **black carbon smoke** to quickly rise above cloud level into the stratosphere, where it could not be rained out. The smoke would circle the Earth in **less than two weeks** and would form **a** global **stratospheric smoke layer** that **would remain for** more than **a decade**. The smoke would absorb warming sunlight, which would **heat the smoke** to temperatures near the boiling point of water, producing **ozone losses of** 20 to **50 percent** over populated areas. This would almost double the amount of UV-B reaching the most populated regions of the mid-latitudes, and it would create UV-B indices unprecedented in human history. In North America and Central Europe, the time required to get a painful sunburn at mid-day in June could decrease to as little as six minutes for fair-skinned individuals. As the smoke layer blocked warming sunlight from reaching the Earth’s surface, it would produce the **coldest** average **surface temperatures** in the last 1,000 years. The scientists calculated that global **food production would decrease** by 20 to **40 percent** during a five-year period following such a war. Medical experts have predicted that the shortening of growing seasons and corresponding decreases in agricultural production could cause up to **two billion** people to perish from **famine**. The climatologists also investigated the effects of a nuclear war fought with the vastly more powerful modern **thermonuclear** weapons possessed by the United States, Russia, China, France, and England. Some of the thermonuclear weapons constructed during the 1950s and 1960s were 1,000 times more powerful than an atomic bomb. During the last 30 years, the average size of thermonuclear or “strategic” nuclear weapons has decreased. Yet today, each of the approximately 3,540 strategic weapons deployed by the United States and Russia is seven to **80 times** more powerful than the atomic bombs modeled in the India-Pakistan study. The smallest strategic nuclear weapon has an explosive power of **100,000 tons of TNT**, compared to an atomic bomb with an average explosive power of 15,000 tons of TNT. Strategic nuclear weapons produce much larger nuclear firestorms than do atomic bombs. For example, a standard Russian 800-kiloton warhead, on an average day, will ignite fires covering a surface area of 90 to 152 square miles. A **war** fought with hundreds or thousands of U.S. and Russian strategic nuclear weapons would **ignite immense** **nuclear firestorms** covering land surface areas of many thousands or **tens of thousands** of square miles. The scientists calculated that these fires would produce up to **180 million tons** of black carbon soot and **smoke**, which would form a dense, **global stratospheric smoke layer**. The smoke would remain in the stratosphere for 10 to **20 years**, and it **would block** as much as **70 percent of sunlight** from reaching the surface of the Northern Hemisphere and 35 percent from the Southern Hemisphere. So much sunlight would be blocked by the smoke that the noonday sun would resemble a full moon at midnight. Under such conditions, it would only require a matter of days or weeks for daily minimum **temperatures** to **fall below freezing** in the largest agricultural areas of the Northern Hemisphere, where freezing temperatures would occur every day for a period of between one to more than two years. Average surface temperatures would become colder than those experienced 18,000 years ago at the height of the last Ice Age, and the prolonged cold would cause average rainfall to decrease by up to 90%. Growing seasons would be completely eliminated for more than a decade; it would be **too cold and dark** to grow food crops, **which would doom the** majority of the **human population.** NUCLEAR WINTER IN BRIEF The profound cold and darkness following nuclear war became known as nuclear winter and was first predicted in 1983 by a group of NASA scientists led by Carl Sagan. During the mid-1980s, a large body of research was done by such groups as the Scientific Committee on Problems of the Environment (SCOPE), the World Meteorological Organization, and the U.S. National Research Council of the U.S. National Academy of Sciences; their work essentially supported the initial findings of the 1983 studies. The idea of nuclear winter, published and supported by prominent scientists, generated extensive public alarm and put political pressure on the United States and Soviet Union to reverse a runaway nuclear arms race, which, by 1986, had created a global nuclear arsenal of more than 65,000 nuclear weapons. Unfortunately, this created a backlash among many powerful military and industrial interests, who undertook an extensive media campaign to brand nuclear winter as “bad science” and the scientists who discovered it as “irresponsible.” Critics used various uncertainties in the studies and the first climate models (which are primitive by today’s standards) as a basis to criticize and reject the concept of nuclear winter. In 1986, the Council on Foreign Relations published an article by scientists from the National Center for Atmospheric Research, who predicted drops in global cooling about half as large as those first predicted by the 1983 studies and described this as a “nuclear autumn.”

## 1AC – Advantage—Escalation

#### KOZ’s cause conflict – two warrants.

#### **1 -- Geopolitical Tensions –** Western use of Keep-Out Zones is a ploy to exclude Eastern countries from space development and mining – that causes international space competition between the United States and the RIC triad.

**EurAsian Times 20** [EurAsian Times Desk, 5-8-2020, "US Ignores Russia For Moon Mining Pact; Can China, India Join Moscow For A Similar Mission?," Latest Asian, Middle-East, EurAsian, Indian News, <https://eurasiantimes.com/us-ignores-russia-for-moon-mining-pact-can-china-india-join-moscow-for-a-similar-pact/>] [pT]

In the next few weeks, the US will aim to formally negotiate the accords with allies that have ‘like-minded’ interests in lunar mining. Canada, Japan, the EU and the United Arab Emirates are the countries that will possibly team up with NASA. Russia, one of the powerhouses of space technology and innovation, has been left out of the agreement. The U.S. Defense Department views Russia as a hostile spacefaring country due to its “threatening” satellite movements toward U.S. spy satellites and as a result, won’t include Moscow in Artemis Accords negotiations. In early April, Russia had criticised Donald Trump’s executive order that encouraged citizens to mine the lunar surface and celestial bodies for commercial purposes and linked the policy to colonialism saying it “hardly sets the countries to a fruitful cooperation.” Asian giants and rising space powers China and India are also not part of the lunar accord even though both nations are also experienced space players with equally high ambitions. Some netizens speaking to the EurAsian Times were left wondering if the RIC triad (Russia, India and China) could possibly join hands in a similar accord? All three countries have put forward proposals for mining in space in the past with Russia setting up the Roscosmos State Corporation for Space Activities and Bejing and New Delhi floating ideas about possible helium-3 extraction.

#### Sino-Russian alliance decks U.S. hegemony in space.

**Mahshie 21** [Abraham, Mahshie, Air Force Magazine, 6-29-2021, "Russia and China Could Team Up to Challenge US Space Superiority, Experts Say," Air Force Magazine, <https://www.airforcemag.com/russia-china-team-up-challenge-us-space-superiority/>] [pT]

Russia and China jointly submitted a UN resolution in 2008 to limit space weapons, but of late, their cooperation has gone further. Recently, the two cooperated on the Chinese space station and signed a memorandum of understanding on a potential lunar base. Commercial cooperation between two of America’s chief space adversaries can easily extend to military applications, the expert panel argued, even though historical differences may arise. “Russia has experience on deception in space,” Loverro said. “Russia has experience that is incredibly valuable to a technologically advanced, but operationally inexperienced China.” The former head of NASA’s human spaceflight program also qualified Russia’s malicious expertise as more in the cyber realm while he viewed China as more advanced in the space domain. “The combination of those two could be very dangerous,” he said. Former commander of U.S. Strategic Command and Air Force Space Command, retired Gen. C. Robert Kehler spoke to his Cold War-era knowledge between the two communist countries. “I think it remains to be seen what that partnership really does,” he said. “During the Cold War, from my perspective, when Russia and China said that they were working together, they were going to cooperate on things, they have never seemed to me to be natural partners,” Kehler explained. “I don’t know it’s going to result in anything that’s meaningful here.” Loverro offered the last word about the increased proximity of civil space cooperation between Russia and China. “That represents a very dangerous position for us because Russia has the operational space knowledge, China has the technology and the funding,” he said. “Together, they can be a significant competitor for the U.S., and certainly their ambition remains to be a great space power.” Smith hedged when asked if the [$17.4 billion Space Force budget](https://www.airforcemag.com/space-force-2022-budget-request/) request was correctly apportioned to meet the threat posed by America’s space adversaries. “More or less, I think that the Space Force budget is correct,” he said. “I got to do a deeper dive on that to really understand it, but I think it’s moving more or less in the right direction.” Smith was less certain that a combined Russia-China team was percolating to challenge American space superiority, but he said the U.S. should prepare regardless. “I don’t think anyone has any idea whether or not Russia and China are going to team up,” he said. “But whether they team up or not, we need to be ready for it. We need to be able to protect our systems and we need to be able to deter our adversaries from attacking them in the first place.”

#### Primacy and allied commitments solve arms races and great power war – reject old defense that ignores emerging instability and compounding risk. Unipolarity is sustainable and stops power vacuums and escalation across the globe

Brands 18 [Hal, Henry Kissinger Distinguished Professor at Johns Hopkins University's School of Advanced International Studies and a senior fellow at the Center for Strategic and Budgetary Assessments." American Grand Strategy in the Age of Trump." Page 129-133] [pT]

Since World War II, the United States has had a military second to none. Since the Cold War, America has committed to having overwhelming military primacy. The idea, as George W. Bush declared in 2002, that America must possess “strengths beyond challenge” has featured in every major U.S. strategy document for a quarter century; it has also been reflected in concrete terms.6

From the early 1990s, for example, the United States consistently accounted for around 35 to 45 percent of world defense spending and maintained peerless global power-projection capabilities.7 Perhaps more important, U.S. primacy was also unrivaled in key overseas strategic regions—Europe, East Asia, the Middle East. From thrashing Saddam Hussein’s million-man Iraqi military during Operation Desert Storm, to deploying—with impunity—two carrier strike groups off Taiwan during the China-Taiwan crisis of 1995– 96, Washington has been able to project military power superior to anything a regional rival could employ even on its own geopolitical doorstep.

This military dominance has constituted the hard-power backbone of an ambitious global strategy. After the Cold War, U.S. policymakers committed to averting a return to the unstable multipolarity of earlier eras, and to perpetuating the more favorable unipolar order. They committed to building on the successes of the postwar era by further advancing liberal political values and an open international economy, and to suppressing international scourges such as rogue states, nuclear proliferation, and catastrophic terrorism. And because they recognized that military force remained the ultima ratio regum, they understood the centrality of military preponderance.

Washington would need the military power necessary to underwrite worldwide alliance commitments. It would have to preserve substantial overmatch versus any potential great-power rival. It must be able to answer the sharpest challenges to the international system, such as Saddam’s invasion of Kuwait in 1990 or jihadist extremism after 9/11. Finally, because prevailing global norms generally reflect hard-power realities, America would need the superiority to assure that its own values remained ascendant. It was impolitic to say that U.S. strategy and the international order required “strengths beyond challenge,” but it was not at all inaccurate.

American primacy, moreover, was eminently affordable. At the height of the Cold War, the United States spent over 12 percent of GDP on defense. Since the mid-1990s, the number has usually been between 3 and 4 percent.8 In a historically favorable international environment, Washington could enjoy primacy—and its geopolitical fruits—on the cheap.

Yet U.S. strategy also heeded, at least until recently, the fact that there was a limit to how cheaply that primacy could be had. The American military did shrink significantly during the 1990s, but U.S. officials understood that if Washington cut back too far, its primacy would erode to a point where it ceased to deliver its geopolitical benefits. Alliances would lose credibility; the stability of key regions would be eroded; rivals would be emboldened; international crises would go unaddressed. American primacy was thus like a reasonably priced insurance policy. It required nontrivial expenditures, but protected against far costlier outcomes.9 Washington paid its insurance premiums for two decades after the Cold War. But more recently American primacy and strategic solvency have been imperiled.

THE DARKENING HORIZON For most of the post–Cold War era, the international system was— by historical standards—remarkably benign. Dangers existed, and as the terrorist attacks of September 11, 2001, demonstrated, they could manifest with horrific effect. But for two decades after the Soviet collapse, the world was characterized by remarkably low levels of great-power competition, high levels of security in key theaters such as Europe and East Asia, and the comparative weakness of those “rogue” actors—Iran, Iraq, North Korea, al-Qaeda—who most aggressively challenged American power. During the 1990s, some observers even spoke of a “strategic pause,” the idea being that the end of the Cold War had afforded the United States a respite from normal levels of geopolitical danger and competition. Now, however, the strategic horizon is darkening, due to four factors.

First, great-power military competition is back. The world’s two leading authoritarian powers—China and Russia—are seeking regional hegemony, contesting global norms such as nonaggression and freedom of navigation, and developing the military punch to underwrite these ambitions. Notwithstanding severe economic and demographic problems, Russia has conducted a major military modernization emphasizing nuclear weapons, high-end conventional capabilities, and rapid-deployment and special operations forces— and utilized many of these capabilities in conflicts in Ukraine and Syria.10 China, meanwhile, has carried out a buildup of historic proportions, with constant-dollar defense outlays rising from US$26 billion in 1995 to US$226 billion in 2016.11 Ominously, these expenditures have funded development of power-projection and antiaccess/area denial (A2/AD) tools necessary to threaten China’s neighbors and complicate U.S. intervention on their behalf. Washington has grown accustomed to having a generational military lead; Russian and Chinese modernization efforts are now creating a far more competitive environment.

#### **2 -- Exclusion –** disputes about the ungoverned nature of KOZs ensures conflicts in international relations.

**Gilbert 21** [Alex Gilbert, 4-26-2021, "Mining in Space Is Coming," Milken Institute Review, <https://www.milkenreview.org/articles/mining-in-space-is-coming>] [pT]

The ungoverned nature of outer space and lack of national ownership plainly create the possibility of conflict. Even if companies have rights to own a resource when they extract it, they do not necessarily have rights to a resource while it remains in place. If two companies from different nations want to mine the same area, both technically have the right to do so. “First come, first serve” may work for one nation’s activities, but nothing prevents ventures from another country building adjacent mines, with attendant economic and operational risks. The international nature of space exacerbates the lack of ownership, as disputes between companies from separate countries become a matter of international relations. To begin addressing these challenges, the United States negotiated the Artemis Accords in 2020, a multilateral agreement to guide near-term lunar exploration. Signatories of the accords include many U.S. space partners: the United Kingdom, Luxembourg, UAE, Australia, Canada, Japan, Italy and Ukraine. Much of the accords are natural extensions of the Outer Space Treaty and are a welcome development. For example, one provision provides for interoperability between different nations’ space technologies. But other aspects of the accords are problematic. They currently exclude major space players like Russia, China and India. They provide for “safety zones” around mining sites, which raises fears about exclusion of other countries from prime locations and de facto national appropriation.

#### China views private KOZs as confrontational competition – that escalates tensions.

**Zhen 20** [Liu Zhen, 10-15-2020, "China, US space rivalry ‘may heat up’ after Nasa’s Artemis Accords signed," South China Morning Post, <https://www.scmp.com/news/china/diplomacy/article/3105722/china-us-space-rivalry-may-heat-after-nasas-artemis-accords>] [pT]

Rivalry between China and the United States in [space exploration](https://www.scmp.com/topics/space?module=inline&pgtype=article) is expected to intensify after Washington signed a legal framework for behaviour in space with seven other nations, Chinese observers say. Nasa’s new Artemis Accords were signed on Tuesday between the US and Australia, Britain, Canada, Italy, Japan, Luxembourg and the United Arab Emirates. The accords allow countries or private companies to extract lunar resources and create temporary “safety zones” on the moon for their operation to “avoid harmful interference” from others. They also require countries to be transparent about their plans in space and to share their scientific discoveries as required by the Outer Space Treaty, and to take part in mutual emergency help and reduction of space debris. Mike Gold, Nasa’s acting associate administrator for the office of international and inter-agency relations, said even though Russia and China were not signatories, the accords would create a baseline for other nations to follow. “By embracing our values, along with our partners, we’re creating a track record, a norm of behaviour that will influence the entire world to proceed with the transparent, peaceful and safe exploration of space,” Gold told The Washington Post. But Chinese observers expected competition in space exploration between the US and China to heat up. Zhou Chenming, a researcher from the Yuan Wang military science and technology institute in Beijing, said this would happen as more private companies from the US invested in the extraction of lunar resources. Beijing was also sceptical about the accords, said Zhao Tong, a senior fellow at the Carnegie-Tsinghua Centre for Global Policy. “China traditionally believes that space exploration or moon missions are done by state actors,” he said. “From a nation’s point of view, there will always be concerns over questions of sovereignty and security.” The 1967 Outer Space Treaty states that the moon is “not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means”, while a 1979 UN pact governing activities on the moon and other celestial bodies says any resources of the moon shall not become the property of any state, organisation or individual. Zhao said the accords could give American companies an advantage in exploration and extraction of lunar resources – an area where China lags. Space is a growing area of rivalry between the two countries. Both launched missions to Mars in July, and both are expected to reach the red planet in February. [China sent its Tianwen-1 probe](https://www.scmp.com/news/china/science/article/3094343/china-launches-first-mission-mars?module=inline&pgtype=article) for the country’s first mission to Mars, while [Nasa launched its Perseverance rover](https://www.scmp.com/news/world/united-states-canada/article/3095410/nasas-perseverance-mars-rover-blasts-search-signs?module=inline&pgtype=article), the fifth US mission. Space is set out as research priority in Beijing’s current five-year plan to 2020, and in recent years China has become a more active player in space exploration, especially the moon. Its Chang’e-4 probe was [the first to land on the far side of the moon](https://www.scmp.com/news/china/article/2180453/chinas-change-4-lunar-spacecraft-poised-touch-down-dark-side-moon?module=inline&pgtype=article) last year, while the Chang’e-5 is expected to be launched in November, tasked with bringing back at least 2kg (4.4 pounds) of lunar rock samples. China also plans to send a crewed mission to the moon in 2025. Meanwhile, Nasa has restarted its own moon programme, the Artemis Plan – which the accords are named after – to land the first woman and next man on the moon by 2024. This time it is targeting the lunar south pole region, believed to be the location of the most valuable resource on the moon: water ice. Shanghai-based military commentator Ni Lexiong said Beijing would see the new accords as the US trying to set international rules with a “small group of allies”. “So international relations on Earth, including the rivalry and conflicts between nations, will inevitably be brought to the moon,” Ni said. Responding to the accords on Thursday, Chinese foreign ministry spokesman Zhao Lijian said space exploration should be for all. “China has always been committed to the peaceful use of outer space,” he said. “The exploration and peaceful use of outer space is a common cause for all mankind and should be for the benefit of all mankind.” He said any discussion of a legal framework for behaviour in space should be conducted within the platform of the United Nations and the Outer Space Treaty, which includes 110 countries.

## 1AC – FWK

#### Extinction comes first!

**Pummer 15** [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

**There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now**, whatever general moral view we adopt**: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war.** How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that **we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world.** According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. **Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here.** If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how **reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people.** Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, **this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake.** **Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter.** Even John Rawls wrote, “**All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.**” **Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view.** **They’d thus imply very strong reasons to reduce existential risk**, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. **Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk.** It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). **To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being.** To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – **suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being**, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But **once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk.** Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. **We should also take into account moral uncertainty.** **What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts?** I’ve just argued that **there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree.** But **even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one** (and 10% sure that one of these other ones is correct), **they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk.** Perhaps most disturbingly still, **even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world.** Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. **It is enough for my claim that there is moral agreement in the relevant sense if**, at least given certain empirical claims about what future lives would most likely be like, **all minimally plausible moral views would converge on the conclusion that we should try to save the world.** While there are some non-crazy **views that place significantly greater moral weight on avoiding suffering than on promoting happiness**, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless **seem to be fairly implausible views.** And **even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve.** Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. **Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast.** We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. **If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period.** Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. **Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.**” (From chapter 36 of On What Matters)