# 1NC

## 1

### 1NC – CP

#### Counterplan text: The Committee on the Peaceful use of Outer Space ought to

#### establish an application system for property rights on celestial bodies. Applications and approval of property rights should be granted upon the condition of

#### open disclosure of data gathered in the exploration of a celestial body

#### Applications must be publicly announced

#### Property Rights will be made tradeable between private entities

#### Property Rights will be set to expire on the conclusion of a successful extraction mission

#### Private Entities will only be allowed one property right grant per celestial body and cannot have more than one grant at a time

#### Ban the militarization of outer space

#### The counterplan establishes international norms for safe extraction of resources on celestial bodies while increasing R&D in outer space.

**Steffen 21** [Olaf Steffen, Olaf is a scientist at the Institute of Composite Structures and Adaptive Sytems at the German Aerospace Center. 12-2-2021, "Explore to Exploit: A Data-Centred Approach to Space Mining Regulation," Institute of Composite Structures and Adaptive Systems, German Aerospace Center, [https://www.sciencedirect.com/science/article/pii/S0265964621000515 accessed 12/12/21](https://www.sciencedirect.com/science/article/pii/S0265964621000515%20accessed%2012/12/21)] Adam

4. The data-centred approach to space mining regulation

4.1. Core description of the regulatory regime and mining rights acquisition process

The data gathered in the exploration of a [celestial body](https://www.sciencedirect.com/topics/social-sciences/astronomical-systems) is not only of value for space mining companies for informing them whether, where and how to exploit resources from the body in question, but also for science. The irretrievability of information relating to the solar system contained in the body that will be lost during resource exploitation carries a value for humanity and future generations and can thus be assigned the characteristic of a common heritage for all mankind as invoked in the Moon Agreement. This characteristic makes exploration data an exceptional and unique candidate for use in a mechanism for acquiring mining rights because its preservation is of public interest and its disclosure in exchange for exclusive mining rights does not place any additional burden on the mining company. The following principles would form the cornerstones of the proposed regulatory regime and rights acquisition mechanism based on exploration data:

Without preconditions, no entity has a right to mine the resources of a celestial body.

An international regulatory body administers the existing rights of companies for mining a specific celestial body.

Mining rights to such bodies can be applied for from this international regulatory body, with applications made public. The application expires after a pre-set period.

Mining rights are granted on the provision and disclosure of exploration data on the celestial body within the pre-set period, proposedly gathered in situ, characterising this body and its resources in a pre-defined manner.

The explorer's mining right to the resources of the celestial body is published by the regulatory body in a mining rights grant.

The data concerning the celestial body are made public as part of the rights grant within the domain of all participating members of the regulatory regime.

The exclusive mining rights to any specific body are tradeable.

The scope of the regulatory body with respect to the granting of mining rights is not revenue-oriented.

The international regulatory body would thus act as a curator of a rights register and an attached database of exploration data. The concept is superficially comparable to patent law, where exclusive rights are granted following the disclosure of an invention to incentivise the efforts made in the development process. In the following section, the characteristics of such a regulatory regime are further discussed with respect to the formation of [monopolies](https://www.sciencedirect.com/topics/social-sciences/monopolies), market dynamics, conflict avoidance, inclusivity towards less developed countries and the viability of implementation.

4.2. Discussion and means of implementation

The proposed regulatory mechanism has advantages both from a business/investor and society perspective. First, it prevents already highly capitalised companies from acquiring exploitation rights in bulk to deny competitors those objects that are easiest to exploit or most valuable, which would otherwise be possible in any kind of pay-for-right mechanism and could result in preventing market access to smaller, emerging companies. Thus, early monopoly formation can be avoided.

The use of data disclosure for the granting of mining rights ensures the scientific community has access to this invaluable source of information. In this way, space mining prospecting missions can lead to a boost in research on small celestial bodies at a speed unmatchable by pure government/agency funded science probes. This usefulness to the scientific community could lead to sustained partnerships between prospecting companies and scientific institutions and could even provide a source of funding for the companies through R&D grants and public-private partnerships. The results of the exploration efforts contribute to research on the formation of planets and the history of the solar system and provide valuable insight for space defence against asteroids. The transition of exploration from a tailored mission profile with a purpose-built spacecraft to a standard task in space flight would also lead to a cost reduction of the respective exploration spacecraft through [economies of scale](https://www.sciencedirect.com/topics/social-sciences/economies-of-scale). This describes the very benefits Elvis [[24](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib24)] and Crawford [[25](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib25)] imagined as possible effects of a space economy. Thus, there is an immediate return for society from the exploitation rights grant. It also reconciles the adverse interests of space development and [space science](https://www.sciencedirect.com/topics/social-sciences/space-sciences) as laid out by Schwartz [[26](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib26)]. It ensures that, by exploitation, information contained in celestial bodies is not lost for future generations.The application period should not be set in a manner that creates a situation that can be abused through the potential for stockpiling inventory rights. Rather, it is intended to prevent conflict in the phase before exploration data gathered by a mission, as a prerequisite to the mining rights grant, is available. In other words, only one exploration effort at a time can be permitted for a specific body. The time frame between the application and the granting of mining rights (meaning: availability of the required exploration data set) should be tight and should only consider necessary exploration time on site, transit time and possibly a reasonable launch preparation and data processing markup. These contributors to the application period make it clear that the time frame could be dynamic and individualistic, depending on the exploration target (transit time and duration of exploration) and the technology of the exploration probe (transit time). After the expiration of the application period, applications for the exploration target would again be permissible. To prevent the previously mentioned stockpiling of inventory rights, credible proof of an imminent exploration intention would need to be part of the application process, for example, a fixed launch contract or the advanced build status of the exploration probe. Such a mechanism would not contradict the statement in the OST that outer space shall be free for both exploration and scientific investigation. Applications would not apply to purely scientific exploration. An application would only be necessary as a prerequisite for mining. Even resource prospecting could take place without an application (for whatever reason), with a subsequent application comprising in situ data already gathered. For such cases, the application process would need to provide a short period for objections to enable the secretive explorer to make their efforts public. The publication of the application for the mining rights, which is nothing more than a statement of intention to explore, thus provides a strong measure for avoiding conflict.

The transparency of where exploration spacecraft are located and, at a later stage, where mining activities take place, provides additional benefits for the sustainable use of space, trust building and deterrence against malign misuse of mining technology. Involuntary spacecraft collisions of competitors in deep space are prevented by the reduction of exploration efforts at the same destination through the application for mining rights by one applicant at a time. As pointed out by Newman and Williamson [[20](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib20)], this is relevant because space debris does not de-orbit in deep space as in the case of LEO. Deep space may be vast, but the velocities involved mean that small debris particles are no less dangerous. Considering NEO mining with fleets of small spacecraft, malfunctions and/or destructive events could create debris clouds crossing Earth's orbit around the sun on a regular basis, presenting another danger to satellites in Earth's own orbit. Thus, by effectively preventing the collision of two spacecraft, one source of debris creation can be mitigated through this regulation mechanism. With respect to Deudney's [[11](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib11)] scepticism of asteroid mining and the dual-use character of technology to manipulate orbits of celestial bodies, it has to be stated that this potential is truly inherent to asteroid mining. An asteroid redirect mission for scientific purposes was pursued by NASA [[49](https://www.sciencedirect.com/science/article/pii/S0265964621000515" \l "bib49)] before reorientation towards a manned lunar mission. In one way or another, each type of asteroid mining will require the delivery of the targeted resource to a destination via a comparable technology as formerly envisioned by NASA, be it as a raw material or a useable resource processed in situ, even if this is not necessarily done through redirecting the whole asteroid and placing it in a lunar orbit. However, to be misused as a weapon, space mined resources would have to surpass a certain mass threshold to survive atmospheric entry at the target. This seems unfeasible for currently discussed mining concepts using small-scale spacecraft as described in this article. Redirecting larger masses or whole asteroids would require far more powerful mining vessels or small amounts of thrust over long periods of time. The continuous, (for a mining activity) untypical change in the orbit of an asteroid would make a redirect attempt with hostile intent easily identifiable, effectively deterring such an activity in the first place by ensuring the identification of the aggressor long before the projectile hits its target. The proposed database would provide a catalogue of asteroids with exploration and mining activities in place that should be tracked more closely because of their interaction with spacecraft. This would, in fact, be necessary per se as a precaution to avoid catastrophic mishaps, such as the accidental change of a NEO's orbit to intercept Earth by changing its mass through mining.

## 2

### 1NC – T

#### “Appropriation of outer space” is exclusive and permanent

TIMOTHY JUSTIN TRAPP, JD Candidate @ UIUC Law, ’13 quoting Smith 92, TAKING UP SPACE BY ANY OTHER MEANS: COMING TO TERMS WITH THE NONAPPROPRIATION ARTICLE OF THE OUTER SPACE TREATY UNIVERSITY OF ILLINOIS LAW REVIEW [Vol. 2013 No. 4]

The issues presented in relation to the nonappropriation article of the Outer Space Treaty should be clear.214 The ITU has, quite blatantly, created something akin to “property interests in outer space.”215 It allows nations to exclude others from their orbital slots, even when the nation is not currently using that slot.216 This is directly in line with at least one definition of outer-space appropriation.217 [\*\*Start Footnote 217\*\*Id. at 236 (“Appropriation of outer space, therefore, is ‘the exercise of exclusive control or exclusive use’ with a sense of permanence, which limits other nations’ access to it.”) (quoting Milton L. Smith, The Role of the ITU in the Development of Space Law, 17 ANNALS AIR & SPACE L. 157, 165 (1992)). \*\*End Footnote 217\*\*]The ITU even allows nations with unused slots to devise them to other entities, creating a market for the property rights set up by this regulation.218 In some aspects, this seems to effect exactly what those signatory nations of the Bogotá Declaration were trying to accomplish, albeit through different means.219

#### Violation: resource extraction isn’t ownership of land.

Wrench 19 [John, JD Candidate at Case Western, BA from Pace University] “Non-Appropriation, No Problem: The Outer Space Treaty Is Ready for Asteroid Mining,” Case Western Reserve Journal of International Law, Vol. 51 Issue 1, <https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=2546&context=jil>, 2019 RE

An interpretation of Article II supporting a blanket ban on resource ownership is unwarranted by the text of the OST and illfounded on account of the international community’s common practices. Scholars have noted that the international community has never questioned whether scientific samples harvested from celestial bodies belong to the extracting nation.60 Furthermore, space-faring members of the international community rejected the Moon Treaty precisely because it prohibited all forms of ownership in resources extracted from celestial bodies.61 The space-faring nations’ support for the OST, coupled with their rejection of an alternative set of rules governing extracted resources, is at the very least an indication of what those nations believe the non-appropriation principle to stand for.

It is equally improbable that the international community drafted the non-appropriation principle to be merely idealistic rhetoric. The OST leaves no room for interpretations to squirm out from under its ban on sovereign claims of land.62 The following section illustrates, however, that the distinction between sovereign ownership of land, and the vestment of property rights in resources extracted from that land, is nothing new.

#### Vote neg for limits and ground: expanding the topic beyond appropriation allows for affs about any miniscule use of space resources which decimates links to generics which are based on property rights in space and results in a litany of small affirmatives that cause a race to the margins

#### Multilateral treaties are extra-topicality is a voting issue – it wrecks clash and fairness by letting the aff artificially fiat away every topic disad

## 3

### 1NC – K

#### The management of space debris is rooted in a militarized approach to the future that culminates in the *full-spectrum dominance* of the globe.

**Reno 20** (Joshua Ozias Reno, Associate Professor of Anthropology at Binghamton University. PhD from the University of Michigan, “The Wrong Stuff”, chapter 4 of Military Waste: The Unexpected Consequences of Permanent War Readiness Univ of California Press, Feb 4, 2020 Pg. 127-130)DR 19

**Space debris** can be dangerous to orbiting vessels and, as such, it represents an ever-growing hazard to human uses of Earth space. But these objects are hard to track and easy to mistake for something else, even for people who spend all of their time looking up at the night sky. Like space exploration itself, this is a difficult problem to solve, so it is not surprising that **only the most powerful and prominent space agencies imagine they are capable of finding space debris**, let alone clearing it from orbital environments. A core dimension of that power and prominence, moreover, is about having military ambitions that extend beyond the surface of the planet. And, **from the very beginnings**, doing so has meant enrolling amateur or civilian scientists in DoD plans for outer-space. Historically, **solving space-related challenges has meant getting funds and resources from wealthy and powerful nations**. **With the growth of** a permanent war economy, **such expenditure** is very often **tied** **to** imagined or real military applications. Consequently, the history of space exploration has been and continues to be shaped by tensions and networks between **civilian and military** scientific objectives. But these seemingly opposed **groups** also align and become indistinguishable, especially insofar as they embrace a fascination with developing the latest technology and an unrelenting faith in its ability to solve all problems. This is also known as techno-solutionism. Evgeny Morozov (2013) developed this idea related to utopian appraisals of the internet. His account draws heavily on **Hannah Arendt’s** *On Violence* (1970), a book which openly criticizes **US administrations** that thought they could solve global problems through technically ingenuous forms of death and destruction. Broadly defined, techno-solutionism is faith that technical fixes can solve any problem…even when they are targeting a realm like **outer space**, one that is already saturated with the leftovers of generations of technological problem-solving. According to Gökçe Günel (2019, 129), any technical adjustment is not only about “functionality, effectiveness, or use, but rather the ways in which its materially and conceptually indeterminate existence mobilizes potential towards a technically adjusted future.” In this sense, **technical fixes for space debris are more about extending the possibility of future technical intervention in orbital environments**, rather than, for instance, **encouraging ethical reflection** on whether people should create debris at all. Space debris is not just any problem, it is **one that originated** **with** and threatens **space science** and, as such, shows the limits of technical solution-making in general. If it is problematic to see space debris as a technical glitch, as noise in an otherwise perfectly rendered human design, that is because such a view can **mislead us** into thinking that all it takes is a little more ingenuity, a bit more mastery, to solve the problem entirely. But, following Virilio (2007), every new technical innovation and improvement brings a new disaster, an unprecedented act of contamination. If **space debris represents inevitable traces** that human artifacts and projects leave behind in the space beyond Earth, then, whatever the future may hold, this problem is unavoidable. If people want to continue to escape their earthly confines, space debris will have to be reckoned with. Space debris is a possibility that haunts all uses of space *tout court*, rather than an incidental by-product of space exploration and travel. A focus on technical mastery links the cause of space debris with its proposed cure. As a counterpoint, I discuss how amateur astronomers and ham radio operators have engaged with space debris in a different manner and with altogether different goals. Specifically, they tend to look for ways to become attuned with and enliven debris that has been abandoned. Militarizing Civilian Science The possibility of a semiautonomous civilian space agency had defined space exploration from the start, but by the 1970s and ‘80s, funding had dropped precipitously from the heyday of the Apollo missions. By that time, NASA had come under widespread criticism as the country entered recession and other big programs (such as the CIA) and national initiatives (the War on poverty, Civil Rights Legislation, the Vietnam War) were attacked by political representatives and activists across the political spectrum. The prominent images that NASA members used to promote the organization during the 1960s was that of pragmatism, that space efforts would yield scientific benefits. This failed to improve the prestige of the organization within the government, until the Reagan era, when there was a resurgence of nationalist and romanticist rhetoric from earlier in NASA’s history. With the Reagan administration there was an effort, first, to block international efforts to ban weapons use in outer space and, second, to invest new symbolic importance and new financial resources in the militarization of space. Since that time, **solving space debris has become a common pursuit** of space agencies all over the world, both the more militarized and the more civilian among them. By the early 1980s, **satellites were central infrastructure**, particularly for the United States. The militarization of space had already occurred, in other words, and **without extravagant laser weapons**. Consequently, among the most central issues of the time was the testing and development of antisatellite weaponry (ASAT). The use of experimental ASAT has been partly responsible for reorienting international attention to space debris, since ASAT is a spectacular technology, the goal of which is to transform working satellites into unusable waste. Since satellites were so vulnerable to attack, and space treaties did not allow for the defense of particular regions of space as sovereign territory, satellites could be destroyed simply by sending “space mines” to collide with them. This constitutes one clear reason why DARPA and the Air Force are so intent on tracking space debris—they want to know whether satellites colliding with unidentified objects represent coincidental hazards or deliberate attacks. Being able to tell the difference between space debris and an actively launched space mine would be like knowing whether an ocean vessel sank because of an iceberg or a submarine. Even if one cannot capture space debris, being able to detect and identify it might be **necessary to predict or avoid war**. The ambiguities of witnessing discussed in the previous section, not knowing what one is seeing, therefore take on perilous consequences. While Reagan’s “Star Wars” and Trump’s “Space Force” have been heavily discussed and derided, other administrations have had similar designs. Perhaps most enduring has been the Clinton-era concept of *full-spectrum dominance*, first outlined in the United States Space Command “Vision for 2020” released in 1997. This relationship between outer space and defense and security has been so central to US policy that prominent advocates for science, notably Neil deGrasse Tyson, have authored reports suggesting that **NASA could be restored to its former glory by becoming more like DARPA**, that is, the militaristic organization it was partly created ***not to become***. In many ways the DoD’s Defense Advanced Research Projects Agency (**DARPA) is the epitome of techno-solutionist practice**. Though the term *defense* was only added to the acronym later (it was termed ARPA until 1972), **the agency was always closely linked to military interests and problem-solving**. In management studies, the concept of problems that are “DARPA-hard” has become widespread, with websites baiting visitors to see whether their company’s challenges would come close to qualifying. According to Leifer and Steinert (2011, 159), there are four criteria for the agency to consider something DARPA-hard: 1. Technically challenging (beyond current limits); 2. Actionable (proof of concept or prototype); 3. Multidisciplinary (complex); and 4. Far-reaching (advances on a grand scale, radical). At the turn of the century, **DARPA** clearly **determined that solving orbital space debris met these criteria**. Space debris fragments **exceeded the capabilities of the Air Force’s Space Surveillance Network** (SSN), it would take work with specialists from various fields, and the achievement of a solution would be legitimately global in impact. The only thing missing was proof of concept. Their first attempt at a solution was to work with MIT aeronautics labs to develop a specialized telescope to detect faint objects. In 2011, DARPA unveiled a massive new telescope, the Space Surveillance Telescope (SST), specially developed with MIT labs to identify space debris. In contrast with what DARPA spokespersons described as the “soda straw approach” of existing telescopes, the SST would allow wide-angle shots of the night sky, made possible by a much larger aperture and an advanced visual processing system. **In at least one report** provided to NBC, moreover, cleaning up space debris was linked directly with military objectives.

#### Multilateral space governance is the next step in the geopolitical domination of outer space, a critical astropolitics of empire. The move to space policy to solve space mining is indicative of their desire to command and control space, bringing the cosmos under imperial control.

Havercroft and Duvall ‘9 (Jonathan Havercroft and Raymond Duvall; 2009; “Critical astropolitics The geopolitics of space control and the transformation of state sovereignty”; accessed 12/13/21; https://www.law.upenn.edu/live/files/7892-havercroft-and-duvallcritical-astropoliticspdf; Jonathan Havercroft is an Associate Professor in the Department of Politics and International Relations at the University of Southampton. He teaches in the areas of political theory and international relations. He is the editor of the journal Global Constitutionalism; Raymond Duvall is a Professor of Political Science at the University of Minnesota; pages 44-50) HB

Astropolitics: realist and liberal strands Realism and astropolitik Everett Dolman3 draws on the writings of Mackinder and Mahan as inspiration for his development of a theory, which he titles Astropolitik. By the term, astropolitik, Dolman means “the application of the prominent and refined realist vision of state competition into outer space policy, particularly the development and evolution of a legal and political regime for humanity’s entry into the cosmos” (Dolman 2002a: 1). While Mahan focused on the structure of the ocean to develop his theories, and Mackinder focused on the topography of land, Dolman turns his attention toward the cartography of outer space. Whereas, at first glance, space may appear to be a “featureless void,” Dolman argues that it “is in fact a rich vista of gravitational mountains and valleys, oceans and rivers of resources and energy alternately dispersed and concentrated, broadly strewn danger zones of deadly radiation, and precisely placed peculiarities of astrodynamics” (Dolman 2002a: 61). In a manner similar to Mahan’s focus on natural sea lanes and “choke points” and Mackinder’s emphasis of geographic regions, Dolman emphasizes orbits, regions of space, and launch points as geopolitically vital assets over which states can be expected competitively and strategically to struggle for control. Orbital paths are important because stable orbits require virtually no fuel expenditure for satellites, whereas unstable orbits make it impossible for satellites to remain in space for a long time. Furthermore, different types of orbits pass over different parts of the earth at different frequencies. As such, the mission of a spacecraft determines in large part which orbit is most useful for it. There are essentially four types of orbits: low-altitude (between 150 km and 800 km above the Earth’s surface); medium-altitude (ranging from 800 km–35,000 km); high-altitude (above 35,000 km); and highly elliptical (with a perigee of 250 km and an apogee of 700,000 km) (Dolman 2002a: 65–7). In addition to pointing to the division of space into orbital planes, Dolman also identifies four key regions of space: 1 Terra, which includes the Earth and its atmosphere up until “just below the lowest altitude capable of supporting unpowered orbit” (Dolman 2002: 69); 2 Earth Space, which covers the region from the lowest possible orbit through to geo-stationary orbit; 3 Lunar Space, which extends from geo-stationary orbit to the Moon’s orbit; and 4 Solar Space, which “consists of everything in the solar system . . . beyond the orbit of the moon” (Dolman 2002a: 70). For Dolman, Earth Space is the astropolitical equivalent of Mackinder’s Outer Crescent, because controlling it will permit a state to limit strategic opportunities of potential rivals and at the same time allow the projection of force for indirect control (i.e. without occupation) of extensive territory of vital strategic importance, in this case (unlike Mackinder’s) potentially the entire Earth. “Control of Earth Space not only guarantees long-term control of the outer reaches of space, it provides a near-term advantage on the terrestrial battlefield” (Dolman 1999: 93). On the basis of these principles, Dolman develops an “Astropolitik policy for the United States” (Dolman 1999: 156), which calls on the U.S. government to control Earth Space. In the current historical–political juncture, no state controls this region. However, rather than leave it as a neutral zone or global commons, Dolman calls for the U.S. to seize control of this geo-strategically vital asset. According to Dolman’s reasoning, the neutrality of Earth Space is as much a threat to U.S. security as the neutrality of Melos was to Athenian hegemony. To leave space a neutral sanctuary could be interpreted as a sign of weakness that potential rivals might exploit. As such, it is better for the U.S. to occupy Earth Space now. Dolman’s astropolitik policy has three steps. The first involves the U.S. withdrawing from the current space regime on the grounds that its prohibitions on commercial and military exploitation of outer space prevent the full exploitation of space resources. In place of the global commons approach that informs that regime, Dolman calls for the establishment of “a principle of free-market sovereignty in space” (Dolman 2002a: 157), whereby states could establish territorial claims over areas they wish to exploit for commercial purposes. This space rush should be coupled with “propaganda touting the prospects of a new golden age of space exploration” (Dolman 2002a: 157). Step two calls for the U.S. to seize control of low-Earth orbit, where “space-based laser or kinetic energy weapons could prevent any other state from deploying assets there, and could most effectively engage and destroy terrestrial enemy ASAT facilities” (Dolman 2002a: 157). Other states would be permitted “to enter space freely for the purpose of engaging in commerce” (Dolman 2002a: 157). The final step would be the establishment of “a national space coordination agency ... to define, separate and coordinate the efforts of commercial, civilian and military space projects” (Dolman 2002a: 157). Within Dolman’s theory of astropolitik is a will-to-space-based-hegemony fuelled by a series of assumptions, of which we would point to three as especially important. First, it rests on a strong preference for competition over collaboration in both the economic and military spheres. Dolman, like a good realist, is suspicious of the possibilities for sustained political and economic cooperation, and assumes instead that competition for power is the law of international political–economic life. He believes, though, that through a fully implemented astropolitical policy “states will employ competition productively, harnessing natural incentives for self-interested gain to a mutually beneficial future, a competition based on the fair and legal commercial exploitation of space” (Dolman 2002a: 4). Thus, underpinning his preference for competition is both a liberal assumption that competitive markets are efficient at producing mutual gain through innovative technologies, and the realist assumption that inter-state competition for power is inescapable in world politics. As we will note more fully below, this conjunction of liberal and realist assumptions is a hallmark of the logic of empire as distinct from the logic of a system of sovereign states. The second and most explicit of Dolman’s key assumptions is the belief that the U.S. should pursue control of orbital space because its hegemony would be largely benign. The presumed benevolence of the U.S. rests, for Dolman, on its responsiveness to its people. If any one state should dominate space it ought to be one with a constitutive political principle that government should be responsible and responsive to its people, tolerant and accepting of their views, and willing to extend legal and political equality to all. In other words, the United States should seize control of outer space and become the shepherd (or perhaps watchdog) for all who would venture there, for if any one state must do so, it is the most likely to establish a benign hegemony. (Dolman 2002a: 157) However, even if the U.S. government is popularly responsive in its foreign policy – a debatable proposition – the implication of Dolman’s astropolitik is that the U.S. would exercise benign control over orbital space, and, from that position, potentially all territory on Earth and hence all people, by being responsible to its 300 million citizens. As such, this benign hegemony would in effect be an apartheid regime where 95 percent of the world would be excluded from participating in the decision-making of the hegemonic power that controls conditions of their existence. This, too, is a hallmark of empire, not of a competitive system of sovereign states. Third, Dolman’s astropolitik treats space as a resource to be mastered and exploited by humans, a Terra Nulius, or empty territory, to be colonized and reinterpreted for the interests of the colonizer. This way of looking at space is similar to the totalizing gaze of earlier geopolitical theorists who viewed the whole world as an object to be dominated and controlled by European powers, who understood themselves to be beneficently, or, at worst, benignly, civilizing in their control of territories and populations (Ó Tuathail 1996: 24–35). This assumption, like the first two, thus also implicates a hallmark of the logic of empire, namely what Ó Tuathail (1996) calls the ‘geopolitical gaze’ (about which we have more to say below), which works comfortably in tandem with a self-understanding of benign hegemony. When these three assumptions are examined in conjunction, Dolman’s astropolitik reveals itself to be a blueprint for a U.S. empire that uses the capacities of space-based weapons to exercise hegemony over the Earth and to grant access to the economic resources of space only to U.S. (capitalist) interests and their allies. This version of astropolitics, which is precisely the strategic vision underlying the policy pronouncements of the National Security Space Management and Organization Commission (Commission 2001) – and subsequently President George W. Bush – with which we began this chapter, is a kind of spatial, or geopolitical, power within the context of U.S. imperial relations of planetary scope. Its ostensive realist foundations are muted, except as a rather extreme form of offensive realism, because the vision is not one of great power competition and strategic balancing, but rather one of imperial control through hegemony. As such, it brings into question the constitution of sovereignty, since empire and sovereignty are fundamentally opposed constitutive principles of the structure of the international system – the subjects of empire are not sovereign. Thus, if astropolitics is to be in the form of Dolman’s astropolitik (and current U.S. policy aspirations), the future of sovereignty is in question, despite his efforts to position the theory as an expression of the realist assumption of great power competition. In later sections of this chapter, we attempt to show what this bringing sovereignty into question is likely to mean, conceptually and in practice. Before turning to that principal concern, however, we consider an alternative geopolitical theory of astropolitics. Liberal-republican astropolitics Over the past twenty-five years, in a series of articles and recently a major book, Daniel Deudney has attempted to rework the tenets of geopolitics and apply them to the contemporary challenges raised by new weapons technologies – particularly nuclear and space weapons (Deudney 1983, 1985, 1995, 2000, 2002, 2007).4 While Deudney finds geopolitical theory of the late nineteenth century and early twentieth century theoretically unsophisticated and reductionist, he believes that geopolitical attention to material conditions, spatiality, change, and political processes could form the basis of a theoretically sophisticated contextual–materialist security theory of world politics. Deudney starts from a premise about space weaponization similar to the core of Dolman’s astropolitik, namely that if any state were able to achieve military control of space, it would hold potential mastery over the entire Earth. One preliminary conclusion, however, seems sound: effective control of space by one state would lead to planet-wide hegemony. Because space is at once so proximate and the planet’s high ground, one country able to control space and prevent the passage of other countries’ vehicles through it could effectively rule the planet. Even more than a monopoly of air or sea power, a monopoly of effective space power would be irresistible. (Deudney 1983: 17) Rather than developing the implications of this as a strategic opportunity for any one state (e.g. the U.S.), however, Deudney sees it as a collective problem to be kept in check through collaboration; his project is to avoid space-based hegemony through cooperation among states. In a series of articles on global security written in the 1980s – while Cold War tensions between the U.S. and the U.S.S.R. continued to frame much theoretical discussion in international relations – Deudney saw the space age as a double-edged sword in superpower relations. On the one side, space weaponization posed a risk that the superpowers would extend their conflict extra-terrestrially and devise new, deadlier technologies that would enhance the risk of exterminating all of humanity; on the other, according to Deudney, the space age had found productive opportunities for the superpowers to deal with their rivalries in stabilizing collaboration. He notes that the Sputnik mission, while in the popular understanding only an escalation of the Cold War, initially was the result of an internationally organized research program – the International Geophysical Year (Deudney 1985; though see Dolman 2002a: 106–107 for an alternate interpretation of these events as Cold War competition). Another example was President Eisenhower’s proposed “Atoms for Peace” project, which involved the great powers sharing nuclear technology with developing nations for energy purposes. Most famous was the collaboration between the Soviet Union and the U.S. during the 1970s on the rendezvous between an Apollo capsule and the Soyuz space station. Similar multinational collaborations continue to this day, with the most notable example being the International Space Station. In addition to promoting collaboration, according to Deudney, the space age has also enhanced the ability of space powers to monitor each other – through spy satellites – thereby increasing the likelihood that they abide by arms control treaties. Deudney believes that these types of collaboration and increased surveillance could be strengthened and deepened so that great powers could be persuaded over time to “forge missiles into spaceships” (Deudney 1985: 271). In the 1980s this led Deudney to develop a set of specific proposals for a peaceful space policy, including collaboration between space powers on manned missions to the Moon, asteroids, and Mars. The development of an International Satellite Monitoring Agency would make “space-based surveillance technology accessible to an international community” for monitoring ceasefires, crises, compliance with international arms control treaties, and the Earth’s environment (Deudney 1985: 291). These proposals are aimed at promoting collaboration on projects of great scientific and military significance for the individual states. Deudney’s expectation is that such cooperation would mitigate security dilemmas and promote greater ties between states that would co-bind their security without sacrificing their sovereignty. While Deudney has not been explicit about how his astropolitics of collaboration would alter world order, in his more theoretical writings he has elaborated the logic of a liberal-republican international system. In a 2002 article on geopolitics and international theory, he developed what he called a‘historical security materialist’ theory of geopolitics: “[I]n which changing forces of destruction (constituted by geography and technology) condition the viability of different modes of protection (understood as clusters of security practices) and their attendant ‘superstructures’ of political authority structures (anarchical, hierarchical, and federal-republican)” (Deudney 2002: 80). In that work, he identified four different eras in which distinct modes of destruction were predominant: Pre-modern; Early Modern; Global Industrial; and Planetary-Nuclear, as well as two modes of protection: real-statism, which is based on an internal monopoly of violence and external anarchy; and federal-republicanism, which is based on an internal division of powers and an external symmetrical binding of actors through institutions that reduces their autonomy in relation to one another. According to Deudney, in the Planetary-Nuclear age the federal-republican mode of protection is more viable because states “are able to more fully and systematically restrain violence” than under the power balancing practices of real-statist modes of protection (Deudney 2002: 97; see also Deudney 2007: 244–277 for an elaboration of this argument). Although Deudney has not extended his “historical security materialist” approach into explicitly theorizing space weapons, per se (dealt with only tangentially and implicitly in the last two chapters of his recent book), his proposals during the Cold War to foster institutional collaboration between space powers as a way of promoting peace can safely be understood as a form of the mutually binding practices that he associates with the federalrepublican mode of protection. In addition, one of the general conclusions that Deudney reaches about “historical security materialism” is that the more a security context is rich in the potential for violence, the better suited a federal-republican mode of protection is to avoid systemic breakdown. Therefore, it seems reasonable to conclude that within Deudney’s work is a nascent theory of how a federal-republican international system could limit conflict between space powers by binding them together in collaborative uses of space for exploratory and security uses. In this sense, Deudney can be read as the liberal-republican astropolitical counterpart to Everett Dolman.5 While Deudney’s astropolitical theorizations hold out the promise of a terrestrial pacification through space exploration it is interesting to note a significant aporia in his theory – empire as a possible mode of protection. While real-statist modes of protection have an internal hierarchical authority structure, they are based on assumptions of external-anarchy, which is to say a system of sovereign states. Conversely, the federal-republican model is based on a symmetrical binding of units, in a way that no single unit can come to dominate others and accordingly in which they preserve their sovereignty (Deudney 2000, 2002, 2007). In a third mode, to which Deudney gives only scant attention, the case of empire, the hegemony of a single unit is such that other units are bound to it in an asymmetrical pattern that locates sovereignty only in the hegemon, or imperial center. Successful empires, including the Roman, British, and American, permit local autonomy in areas that are not of the imperial power’s direct concern while demanding absolute obedience in areas that are of vital concern to it, particularly when it comes to issues of security.6 Deudney’s implicit astropolitical theory thus ignores structurally asymmetric relations – in effect he ignores power. It is as if in wanting to have the world avoid the possibility of a planetary hegemony at the heart of the premise with which he and Dolman began their respective analyses, he white-washes it by failing to acknowledge the profound asymmetries of aspirations and technological–financial–military capacities among states for control of orbital space. In the next two sections we respond to Deudney’s call for “historical security materialism” by focusing on the premise that he skirts but that Dolman emphasizes, that military control of space means (at least the possibility of) mastery of the Earth. Specifically we examine how a new mode of destruction – space weapons – is the ideal basis for the third mode of protection – empire – through its potential for substantial asymmetry. We argue that the power asymmetries of space weapons have very significant constitutive effects on sovereignty and international systemic anarchy, and underlie the constitution of a new, historically unprecedented, form of empire. Before turning to that central thesis, however, we will first sketch the general contours of a critical astropolitics, which builds on the foundational premise of Dolman and Deudney, but modifies their theories in light of the significant insights of critical theory, particularly with respect to constitutive power. We ask: what consequences of astropolitics can a critical approach illuminate that may be concealed by an astropolitics informed by either liberal-republican or realist assumptions? How can insights offered by the revival of geopolitics in the writings of Deudney and Dolman – particularly the call for a new security materialist mode of analysis – be used to supplement and refine critical international relations theory?

#### Their identification of external threats is an attempt to cohere the self in opposition to the demonized enemy – this psychic reconfiguration justifies endless violence.

Byles ‘3 [Joanna Montgomery; Professor of English in the Department of Foreign Languages and Literatures, University of Cyprus; “Psychoanalysis and War: The Superego and Projective Identification”; Fall 2003; The Ohio State University Press; Volume 8, Number 2; Journal for the Psychoanalysis of Culture and Society; <https://doi.org/10.1353/psy.2003.0030>; Accessed 12/7/20; Recut-NT]

The problem of warfare which includes genocide, and its most recent manifestation, international terrorism, brings into focus the need to understand how the individual is placed in the social and the social in the individual. Psychoanalytic theories of superego aggression, splitting, projection, and projective identification may be useful in helping us to understand the psychic links involved. It seems vital to me writing in the Middle East in September 2002 that we examine our understanding of what it is we understand about war, including genocide and terrorism.

Some psychoanalysts argue that war is a necessary defence against psychotic anxiety (Fornari xx; Volkan), and Freud himself first advanced the idea that war provided an outlet for repressed impulses. (“Why War?” 197). The problematic of these views is the individual’s need to translate internal psychotic anxieties into real external dangers so as to control them. It suggests that culturally warfare and its most recent manifestation, international terrorism and the so-called “war on terrorism,” may be a necessary object for internal aggression and not a pathology.

Indeed, Fornari suggests that “war could be seen as an attempt at therapy, carried out by a social institution which, precisely by institutionalizing war, increases to gigantic proportions what is initially an elementary defensive mechanism of the ego in the schizo-paranoid phase” (xvii-xviii). In other words, the history of war might represent the externalization and articulation of shared unconscious fantasies. This idea would suggest that the culture of war, genocide, and international terrorism provides objects of psychic need. If this is so, with what can we replace them? If cultural formations and historical events have their sources in our psychic functioning—that is to say, in our unconscious fears and desires,—and culture itself provides a framework for expressing, articulating, and coming to terms with these fears and desires, then psychoanalysis may help to reveal why war seems to be an inevitable and ineradicable part of human history.

SUPEREGO AS AN AGENT OF AGGRESSION

In “The Ego and the Id,” Freud formulated a seemingly insoluble dilemma in the very essence of the human psyche: the eternal conflict between the dual instincts of eros, the civilizing life instinct, and the indomitable death instinct (thanatos). He also identified some aspects of the death instinct with superego aggression, suggesting that the superego was the agent of the death instinct in its cruel and aggressive need for punishment and that its operative feeling was frequently a punitive hatred, while other aspects of the superego were protective. As we know, Freud thought the source of the superego was the internalization of the castrating Oedipal father. In chapter seven of Civilization and its Discontents, he theorized that when defusion or separation of the dual instincts occurred, aspects of aggression frequently dominated and that it was the purpose of the ego to find objects for eros and/or aggression either in fantasy or reality. The role phantasy plays in projective identification is something to which I shall return.

Other theorists, such as Melanie Klein, trace the beginning of the superego back to early (infant) oral phantasies of self-destruction, which is a direct manifestation of the death instinct. Klein transformed the oedipal drama by making the mother its central figure and thus playing a vital role in object-relations theory, about which I shall say more later in this essay. Although Klein’s work relied on the dual instinct theory postulated by Freud, she re-defined the drives by emphasizing the way in which the destructive instincts attached themselves to the object, in particular the good-bad breast. Thus for Klein, the site of the superego is derived from oral incorporation of the good/bad breast, contrary to Freud, for whom the site of the superego is the paternal law.

Although the formation of the superego is grounded on the renunciation of loving and hostile Oedipal wishes, it is subsequently refined, by the contributions of social and cultural requirements (education, religion, morality). My argument in this paper is three-fold: (1) These social and cultural requirements in which the superego is grounded may be used by the superego of the state and/or its leader to mobilize aspects of the individual’s aggression during war-time in a way that does not happen in peace-time. (2) Klein’s theory of splitting and projective identification plays an important role in the concept of difference and otherness as enemy. (3) Bion’s development of Klein’s theory into what he called the “container” and the “contained” may offer some way out of the psychic dangers of projective identification by suggesting that we may be able to access our internal psychic world as a transformative power to combat violence both internal and external.

In an early attempt to define war neuroses, or how war mentally traumatizes the psyche, Freud wrote of the conflict “between the soldier’s old peaceful ego and his new warlike one“ becoming acute as soon as the peace-ego realizes what danger it runs in losing its own life to the rashness of its newly formed parasitic double” (SE 17 209). Accepting the violence that is within ourselves as well as in the other, the so-called enemy, is a difficult lesson to learn, and learning to displace our instinctual destructive aggression peacefully is enormously more difficult. To the extent the individual superego is connected to society, which assumes its functions particularly in wartime, the problem of war brings into focus the psychoanalytic problem of the partial defusion (separation) of eros and psychic aggression brought about by war through specifically social processes. These social processes involve the mechanisms by which aspects of the violent and aggressive social superego of the State mobilizes and appropriates some of the dynamic aspects of the individual’s superego aggression: the need to hate, and to punish, for its own purposes, such as genocide or so-called “ethnic cleansing,” and for territorial and economic reasons. Many of these actions are often masked as defending civilization, or an idealized State and/or its leader. This is also true of the ”holy jihads” that are rapidly becoming an enormous threat to the world.

In his book Enemies and Allies, Vamik Volkan suggests that the individual may see the superego of the State as his/her own idealized superego. And indeed, this may in turn help to explain how during war-time the social superego is placed in the individual and how in turn the individual is positioned in the social. In Civilization and its Discontents, to which I have already referred, Freud wrote about the ways in which the regulations and demands of a civilized society harbor the risk of the death instinct (aggression) being released at any favorable opportunity, especially when combined with Eros—i. e., under the pretext of idealism and patriotism. This is especially true when there is a leader who elicits strong emotional attachments from a group or nation.

Of course, I am not arguing that there are not some important aspects of the social superego that are beneficial, for example the ethical and moral laws which shape society and protect its citizens; nevertheless, in wartime and its most recent manifestation, international terrorism, it is precisely these civilizing aspects of the social superego that are ignored or repressed. It seems to me that the failure of civilization historically to control the aggression, cruelty, and hatred that characterize war urgently requires a psychoanalytic explanation. Of course, I am speaking of psychic, not biological (survival of the fittest), aggression. In wartime the externalized superego of the state sanctions killing and violence that is not allowed in peacetime (in fact, such violence against others during peacetime would be considered criminal)—sanctions, in fact, the gratification of warring aggression, thus ensuring that acts of violence need not incur guilt. Why do we accept this? Psychoanalysis posits the idea that aggression is not behavioral but instinctual; not social but psychological. To quote Volkan, who follows Freud, “It is man’s very nature itself.” Obviously, it is vital that humanity find more mature, less primitive ways of dealing with our hatred and aggression than war, genocide, and international terrorism.

The most characteristic thing about this kind of violence and cruelty is its collective mentality: war requires group co-operation, organization, and approval. Some theorists argue that one of the primary cohesive elements binding individuals into institutionalized human association is defence against psychotic anxiety. In Group Psychology Freud writes that “in a group the individual is brought under conditions which allow him to throw off the repressions of his unconscious instinctual impulses. The apparently new characteristics he then displays are in fact the manifestation of this unconscious, in which all that is evil in the human mind is contained as a predisposition” (74). Later in the same essay, when speaking of the individual and the group mind, Freud quotes Le Bon : “Isolated, he may be a cultivated individual; in a crowd, he is a barbarian—that is, a creature acting by instinct. He posseses the spontaneity, the violence, the ferocity, and also the enthusiasm and heroism of primitive beings” (77).

War is a collective phenomenon that mobilizes our anxieties and allows our original sadistic fantasies of destructive omnipotence to be re-activated and projected onto “the enemy.” Some critics have argued that we “need” enemies as external stabilizers of our sense of identity and inner control. It has also been argued that the militancy a particular group shows toward its enemies may partly mask the personal internal conflicts of each member of the group, and that they may therefore have an emotional investment in the maintenance of the enmity. In other words, they need the enemy and are unconsciously afraid to lose it. This fits in with the well known phenomenon of inventing an enemy when there is not one readily available. The individual suicide bomber, or suicide pilot, is just as much part of this group psychology—each bomber, each terrorist, is acting for her/his group, or even more immediately his or her family, from whom she/he derives enormous psychic strength and support. Just as importantly, she/he is acting in the name of her/his leader. All of these identifications require strong emotional attachments. Freud writes, “The mutual tie between members of a group is in the nature of an identification, based upon an important emotional common quality. . . . This common quality lies in the nature of the tie to the leader” (Group 107–8).

In Learning from Experience, Bion theorizes that a social group functions to establish a fixed social order of things (the establishment), and that the individual has to be contained by the establishment of the group. Sometimes the rigidity of the system crushes the individual’s creativity; alternatively, certain special individuals erupt in the group, which goes to pieces under their influence (Bion cites Jesus within the constraints of Israel). A final possibility is the mutual adaptation of one to the other, with a development of both the individual and the group. The development of a sense of self, its integration, its separation, and its protection all begin, of course, in early childhood. Psychoanalysts like Klein, Winnicott, and Bion have explored these ideas in what is known as object relations theory. Volkan writes that the concepts of enemy and ally and the senses of ethnicity and nationality are largely bound up with the individual’s sense of self, and that individuals within an ethnic or national group tend to see their group as a privileged “pseudo-species“ (Erikson) and enemy groups as subhuman (262).

Of course enemies are threatening and do generate a reactive need for defenses; however, a basic psychoanalytic question might be to what extent the degree of defensiveness characteristic of war behavior represents personal, emotional needs of individuals for an enemy to hate, so that they can keep their conflicted selves together, and to what extent the State superego plays a role here.

Our capacity for splitting and projection plays an important part in how we see others and feel about others, and through the process of projective identification, how we make others feel about ourselves and themselves. Projective identification involves a deep split, displacing onto and into others the hateful, bad parts of ourselves, and frequently making them feel hateful to themselves through their own introjection of our hatred. This hatred is often racial or religious, frequently both. Moreover, in the process of projective identification, parts of the self are put into the other, thus depleting the ego. (This process can be a vicious circle, and it is a profoundly disturbing and characteristic pathology, often involving envy and/or rivalry, both corrosive, poisonous forces.) These Kleinian ideas, developed by other theorists, such as Winnicott and Bion, are hugely relevant to the problem of war and genocide, and most recently, of terrorism. Klein argues that in the paranoid schizoid position there is a splitting of good and bad objects, with the good being introjected and the bad being externalized and projected out into someone or onto something else. As with the infant and child, so with the adult, mechanisms of splitting and projection play upon negative and feared connotations of the other, of the enemy, and of difference; projection prevents warring nations from exploring and thus understanding what it is that actually divides them; it prevents mutual response and recognition by promoting exclusivity.

As already mentioned, analysts such as Volkan and Erikson have written about the processes by which an enemy is dehumanized so as to provide the distance a group needs from its perceived enemy. First the group becomes preoccupied with the enemy according to the psychology of minor differences. Then mass regression occurs to permit the group to recover and reactivate more primitive methods. What they then use in this regressed state tends to contain aspects of childish (preoedipal) fury. The enemy is perceived more and more as a stereotype of bad and negative qualities. The use of denial allows a group to ignore the fact that its own externalizations and projections are involved in this process. The stereotyped enemy may be so despised as to be no longer human, and it will then be referred to in non-human terms. History teaches us that it was in this way that the Nazis perceived the Jews as vermin to be exterminated. As I write, Al Qaeda terrorist groups view all Americans as demons and infidels to be annihilated, and many Americans are comforted by demonizing all of bearded Islam. Many Israelis consider most Palestinians as dirt beneath their feet—subhuman—and most Palestinians think of most Israelis as despoilers of the land they are supposed to share.

#### The alt is ecological imagination—

#### Bearing down on every decision in modern policy, the Anthropocene provides a space of affective excess. The alt theorizes a new geographical imagination centered on current apocalypse instead of deferring it to the future. It decenters securitized hierarchies to materially address the tensions inherent to space policy.

Gergan et al ‘20 M., Smith, S., & Vasudevan, P. (2020). Earth beyond repair: Race and apocalypse in collective imagination. Environment and Planning D: Society and Space, 38(1), 91-110.

Here, we have interrogated how reversal, hordes, and elision mark the white supremacy politics of the apocalypse. But do film and art also have the power to dismantle such tropes and inspire new worlds not premised on the present? For Ginn (2015), the Anthropocene as apocalypse is hopeful, containing affective excesses or reserves beyond anxiety that are necessary to fuel transformation, a kind of political knowledge he calls “earth dreaming.” Robbins and Moore (2013: 11) identify an “ecological anxiety disorder,” which emerges when ecological questions cannot be answered without the “positing of political questions.” In our conditions of imperial ruination (Stoler, 2013), the earth’s climate system is “an experiment promulgated by the world’s wealthy and powerful, largely at the peril of the world’s poor” (Robbins and Moore, 2013: 14). It is omnipresent, bearing down on every decision and making each further experiment both urgent and impossible. For Houston (2013), environmental storytelling is “world making” that emerges from communities dwelling in crisis – apocalypse as here, now, already in process, rather than deferred future. Recent work by Derickson and MacKinnon (2015) suggests a “politics of resourcefulness,” while Haraway (2016) encourages us to “stay with the trouble,” and Collard et al. (2015) encourage abundant futures with “more diverse and autonomous forms of life and ways of living together.” Responses to these calls must be premised upon a radical unraveling of the “human” center of Anthropocene imagining, and produce imaginings that render clear how the lexicon of humanity has always been based on exclusionary racial violence and logics (Spillers, 2003; Weheliye, 2014; Wolfe, 2006). Ghosh (2016) implores us to grapple through fiction with the unimaginable challenges wrought by climate change. Movements like Fighting Not Drowning, the People’s Climate March, and Idle No More make explicit connections to history, while also refusing to be contained by it. In this conjuncture, we witness how political articulations grounded in place-based movements are generating a “new planetary geographical imagination” that are challenging “the violent normalizations of a universal claiming to speak for the particular” (Jazeel, 2011: 87, 88). These movements also demonstrate a refusal to accept the fundamentally racialized nature of the human/non-human distinction that Afro-pessimists and other critical race theorists have demonstrated is fundamentally rooted in a violent bounding of humanity. Internal politics notwithstanding, the ongoing refusal by the Standing Rock Sioux, the broader Sioux nation, and the coalition of water protectors to allow the Dakota Access Pipeline to be built at Standing Rock disrupts colonial timelines of inevitability through insistence on both sovereignty (Curley, 2016; Dhillon and Estes, 2016; Whyte, 2017) and on the future as an insistently radical break. In closing, we consider a few examples of cultural productions that reveal the failures of apocalyptic thinking and address our warnings in novel and promising ways. Rupturing the anemic and iterative apocalyptic futurities we analyze above, these examples suggest a “collective sub-text” (Jameson, 1982: 148): a rising popular consciousness that rejects the master-narrative of racialized humanity in search of alternate and abundant futurities. We hope that these flashpoints of rupture will stir scholars of the Anthropocene to narrate apocalypse with greater attention to the revelatory warning signs outlined above, and inspire greater capacity for utopian imagination. Janelle Mona´ e’s Q.U.E.E.N. music video (the acronym stands for Queers Untouchables Emigrants Excommunicated and Negroid), part of her larger conceptual project in which she is Cindi Mayweather, a messianic android, both relies upon and disrupts the aesthetics of the imagined future. Portraying herself and others as museum pieces, she uses the white voice of a captor to describe her work as a “musical weapons program” and her productions as freedom movements “disguised as songs, motion pictures, and works of art.” Mona´ e builds on the narratives generated by Sun Ra and by George Clinton and Parliament- Funkadelic, to create time-traveling Black rebels sent back to disrupt the present (English and Kim, 2013). Despite stating, as part of the Wondaland collective, “We believe songs are spaceships. We believe music is the weapon of the future. We believe books are stars” (Wondaland, n.d.; cited in English and Kim, 2013: 218), Mona´ e escapes the “science is magic” and “teeming hordes” tropes through lyrics that “suggest that pure optimism regarding technoculture understates its vulnerability to being shaped by commodity culture and by regressive notions of human subjectivity and categories of identity” (English and Kim, 2013: 218). In a different register, Frazier (2016: 40) turns to Octavia Butler and Wangechi Mutu, to “move beyond the limited correctives made available through the standards and conventions of Western formal politics,” and to “aesthetically reconstitute the (un)limits of humanity and construct alternative conceptions of ecological ethics within our present world and beyond it.” Frazier analyzes Butler’s Parable of the Sower (1993) and Mutu’s (2013) A Fantastic Journey, noting that despite differences of nationality and culture, both trouble ecology in promising ways. Parable’s apocalypse draws continuities to the past rather than rather than presenting a break; indeed, “the most jarring element of Butler’s future California is its similarities in aesthetics and patterns to the world we inhabit presently” (Frazier, 2016: 48). We are inspired by such work that reveals a different sense of temporality, displaying continuity between the past and ongoing injustice (the present past) or futurities that require fundamental breaks with the present. Such imaginings are freed from the trap of the “epic reversal”: by addressing temporal continuity, white panic over the oppressed gaining power does not drive the narrative. We find an illustration of this in the recent Netflix series Cleverman, which grapples with Australian settler-colonialism through a potent blend of aboriginal history and mythology, sci-fi fantasy, and allegory-heavy social commentary. The series emerged from indigenous writer and producer Ryan Griffen’s desire to give his young son a comic-book style indigenous superhero (Baum, 2016). Set in a dystopian near-future Australia, the series has been interpreted as commentary on ongoing mistreatment of aboriginal groups and other people of color. The show also redresses the erasure of indigenous artists and culture in mainstream media, with a mostly indigenous cast, soundtracks from an indigenous hip-hop artist, and dialogue by key characters in Gumbaynhggir, an aboriginal language whose use was discouraged until recently. Noting that eradication of cultures is also at the heart of the Anthropocene, Tolia-Kelly (2016: 790) implores geographers, “to be mindful of our grammars, vocabularies, genealogies, and versions of historical space-time, through which are we articulating redress.” We have argued that cultural production and scientific production are entangled in the language and intent of social movements and the working of geopolitics. As Davis and Todd (2017: 767) suggest, “The stories we will tell about the origins of the Anthropocene implicate how we understand the relations we have with our surrounds. . .this understanding will have material implications not just for how we understand the world, but this understanding will have material consequences, consequences that affect bodies and land.” How do we respond to Baldwin’s (2016: 86) observation that “white affect pre-conditions population survival by repressing. . . affirmative, nomadic imagination”? One starting point is to engage with visions emerging from movements that are grappling with ongoing apocalypse: their narratives do not succumb easily to a dystopian future, calling instead upon powerful themes of endurance and refusal. This is very much a literary decision: what point of the Apocalyptic narrative are we in? The films we have critiqued here take place during or in the immediate aftermath of apocalyptic events. We argue for a more extended time-frame, a refusal to start with “secondly” (Adichie, 2009). If we begin from the premise that whiteness emerges through and creates affective registers that prompt, enable, and predispose certain people to particular political responses: how can we intervene? What imaginaries of the future both enable a political reckoning with the past and an embodied refusal of surrender to a white eco-apocalyptic future?

## Case

### Framing

#### Just because govts use util doesn’t mean we have to – we don’t operate under the same conditions of uncertainty and no reason why we need to roleplay lawmakers

### Solvency

#### Plan gets circumvented – empirics prove. Circumvention waters down enforcement

Johnson 20 [Matthew Johnson, PhD, University of Technology Sydney, “Mining the high frontier: sovereignty, property and humankind’s common heritage in outer space,” 2020, PhD Thesis, https://opus.lib.uts.edu.au/handle/10453/142380, EA]

However, the terrestrial history of mineral sovereignty tells us that even modest constraints imposed on private space mining interests may be undermined through the capture of democratic institutions. Private mining firms that have drawn on the political infrastructure of the neoliberal network have proven adept at hindering policies and governments that protect common interests in common spaces, from counter-movements against the nationalisation of mining operations to concerted lobbying efforts against international agreements that seek to impose limits on atmospheric carbon emissions. The US rejection of the Moon Agreement is consistent with neoliberal resistance to protective ‘double movements’ in a host of policy arenas, ranging from the creation of ecological conservation zones and provision of free healthcare, to increasing minimum wages or funding for public education. When the interests of mining capital are supported by and even embedded within political institutions (as in the case of ‘revolving doors’ between industry and public office), a concerted effort will need to be made in domestic and international institutions to push international space law towards anything resembling the ambitions of the Moon Agreement. Given the emergent connections between NewSpace and the Atlas Network, any double movement towards the preservation of intergenerational rights in the space commons would likely meet well-funded and well-organised resistance.

### Advantage 1

#### Interdependence checks space war.

**Hall 15** [Luke Penn-Hall 15, Analyst at The Cipher Brief, M.A. from the Johns Hopkins School for Advanced International Studies, B.A. in International Relations and Religious Studies from Claremont McKenna College, “5 Reasons “Space War” Isn’t As Scary As It Sounds”, The Cipher Brief, 8/18/2015, <https://www.thecipherbrief.com/article/5-reasons-%E2%80%9Cspace-war%E2%80%9D-isn%E2%80%99t-scary-it-sounds>] recut Adam

The U.S. depends heavily on military and commercial satellites. If a less satellite-dependent opponent launched an anti-satellite (ASAT) attack, it would have far greater impact on the U.S. than the attacker. However, it’s not as simple as that – for the following reasons:

1. An ASAT attack would likely be part of a larger, terrestrial attack. An attack on space assets would be no different than an attack on territory or other assets on earth. This means that no space war would stay limited to space. An ASAT campaign would be part of a larger conventional military conflict that would play out on earth.

2. Every country with ASAT capabilities also needs satellites. While the United States is the most dependent on military satellites, most other countries need satellites to participate in the global economy. All countries that have the technical ability to play in this space – the U.S., Russia, China and India - also have a vested interest in preventing the militarization of space and protecting their own satellites. If any of those countries were to attack U.S. satellites, it would likely hurt them far more than it would hurt the United States.

3. Destruction of satellites could create a damaging chain reaction. Scientists warn that the violent destruction of satellites could result in an effect called an ablation cascade. High-velocity debris from a destroyed satellite could crash into other satellites and create more high-velocity debris. If an ablation cascade were to occur, it could render certain orbital levels completely unusable for centuries.

4. Any country that threatened access to space would threaten the global economy. Even if a full-blown ablation cascade didn’t occur, an ASAT campaign would cause debris, making operating in space more hazardous. The global economy relies on satellites and any disruption of operations would be met with worldwide disapproval and severe economic ramifications.

5. International Prohibits the Use of ASAT Weapons. Several international treaties expressly prohibit signatory nations from attacking other countries’ space assets. It is generally accepted that space should be treated as a global common area, rather than a military domain.

While it remains necessary for military planners to create contingency plans for a, space war it is a highly unlikely scenario. All involved parties are incentivized against attacking. However, if a space war did occur, it would be part of a larger conflict on Earth. Those concerned about the potential for war in space should be more concerned about the potential for war, period.

### Advantage 2

#### Treaties & multilateralism fail – Russia and China say no, or the plan gets watered down.

**Bahney and Pearl 19** [Benjamin Bahney and Jonathan Pearl, 3-26-2019, "Why Creating a Space Force Changes Nothing," BENJAMIN BAHNEY and JONATHAN PEARL are Senior Fellows at the Lawrence Livermore National Laboratory’s Center for Global Security Research and contributing authors to [Cross Domain Deterrence: Strategy in an Era of Complexity](https://archive.md/o/Hlbi1/https:/www.amazon.com/Cross-Domain-Deterrence-Strategy-Era-Complexity/dp/0190908653). Foreign Affairs, [https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing accessed 12/10/21](https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing%20accessed%2012/10/21)] Adam

As Russia and China continue to push forward, U.S. policymakers may be tempted to use treaties and diplomacy to head off their efforts entirely. This option, although alluring on paper, is simply not feasible. Existing treaties designed to limit military competition in space have had little success in actually doing so. The 1967 Outer Space Treaty bans parties from placing nuclear weapons or other weapons of mass destruction in space, on the moon, or on other celestial bodies, but it has no formal mechanism for verifying compliance, and places no restrictions on the development or deployment in space of conventional antisatellite weapons. Even if it were possible to convince Moscow and Beijing of the benefits of comprehensive space arms control, existing technology makes it extremely difficult to verify compliance with the necessary treaty provisions—and without comprehensive and reliable verification, treaties are toothless. Moreover, regulating the development and deployment of antisatellite weapons is extremely difficult, both because they include such a broad and diverse range of technologies and because many types of antisatellite weapons can be concealed or explained away as having some other use. Unsurprisingly, Russia and China’s draft Treaty on the Prevention of Placement of Weapons in Space, which they have been pushing for several years now, has an unenforceable definition of what constitutes a “weapon” and does nothing at all to address ground-based antisatellite weapons development.