## 1 – Set Col

#### Settlerism is an everyday process shaped by affective investments in institutions that claim jurisdiction over native land. Legal and political action is inextricably dependent on the elimination of the native.

Mark Rifkin, PhD, Director of the Women's and Gender Studies Program and Professor of English at the University of North Carolina, Greensboro. “Settler common sense.” Settler Colonial Studies, 2013 Vol. 3, Nos. 3–4, 322–340, <http://dx.doi.org/10.1080/2201473X.2013.810702>. JJN

In Walden (1854), Henry David Thoreau offers a vision of personhood divorced from the state, characterizing his experience of “Nature” during his time at Walden Pond as providing him with a sense of his own autonomous embodiment and a related set of ethical resources that enable him to reject the demands of contemporary political economy.1 The invocation of “Nature” appears to bracket the question of jurisdiction, opening into a different conceptual and phenomenological register that displaces the problem of locating oneself in relation to the boundaries of the state. However, the very feeling that one has moved beyond geopolitics, that one has entered a kind of space that suspends questions of sovereignty or renders them moot, depends on the presence of an encompassing sovereignty that licenses one’s access to that space. If the idea of “Nature” holds at bay the question of jurisdiction so as to envision a kind of place for cultivating a selfhood that can oppose state logics/politics, it also effaces the ways that experience/vision of personhood itself may arise out of the legal subjectivities put in play by the jurisdictional claiming/clearing of that space as against geopolitical claims by other polities, specifically Native peoples. Thoreau offers an example of how settlement – the exertion of control by non-Natives over Native peoples and lands – gives rise to modes of feeling, generating kinds of affect through which the terms of law and policy become imbued with a sensation of everyday certainty. This affective experience productively can be characterized as an instantiation of what more broadly may be characterized as settler common sense. The phrase suggests the ways the legal and political structures that enable non-Native access to Indigenous territories come to be lived as given, as simply the unmarked, generic conditions of possibility for occupancy, association, history, and personhood. Addressing whiteness in Australia, Fiona Nicoll argues that “rather than analysing and evaluating Indigenous sovereignty claims…, we have a political and intellectual responsibility to analyse and evaluate the innumerable ways in which White sovereignty circumscribes and mitigates the exercise of Indigenous sovereignty”, and she suggests that “we move towards a less coercive stance of reconciliation with when we fall from perspective into an embodied recognition that we already exist within Indigenous sovereignty”. 2 Addressing the question of how settlement as a system of coercive incorporation and expropriation comes to be lived as quotidian forms of non-Native being and potential, though, may require tactically shifting the analytical focus such that Indigenous sovereignties are not at the center of critical attention, even as they remain crucial in animating the study of settler colonialism and form its ethical horizon. “An embodied recognition” of the enduring presence of settler sovereignty, as well as of quotidian non-Native implication in the dispossession, effacement, and management of indigeneity, needs to attend to everyday experiences of non-relation, of a perceptual engagement with place, various institutions, and other people that takes shape around the policies and legalities of settlement but that do not specifically refer to them as such or their effects on Indigenous peoples. In order to conceptualize the mundane dynamics of settler colonialism, the quotidian feelings and tendencies through which it is continually reconstituted and experienced as the horizon of everyday potentiality, we may need to shift from an explicit attention to articulations of Native sovereignty and toward an exploration of the processes through which settler geographies are lived as ordinary, non-reflexive conditions of possibility. In Marxism and Literature, Raymond Williams argues for the necessity of approaching “relations of domination and subordination” as “practical consciousness” that saturat[es] … the whole substance of lived identities and relationships, to such a depth that the pressures and limits of what can ultimately be seen as a specific economic, political, and cultural system seem to most of us the pressures and limits of simple experience and common sense.3 Understanding settlement as, in Williams’s terms, such a “structure of feeling” entails asking how emotions, sensations, psychic life take part in the (ongoing) process of realizing the exertion of non-Native authority over Indigenous peoples, governance, and territoriality in ways that saturate quotidian life but are not necessarily present to settlers as a set of political propositions or as a specifically imperial project of dispossession. In the current scholarly efforts to characterize settler colonialism, the contours of settlement often appear analytically as clear and coherent from the start, as a virtual totality, and in this way, the ongoing processes by which settler dominance actively is reconstituted as a set of actions, occupations, deferrals, and potentials slide from view. We need to ask how the regularities of settler colonialism are materialized in and through quotidian non-Native sensations, inclinations, and trajectories. Moreover, administrative initiatives and legalities become part of everyday normalizations of state aims and mappings but in ways that also allow for an exceeding of state interests that potentially can be turned back against the state, giving rise to oppositional projects still given shape and momentum by the framings that emerge out of the ongoing work of settler occupation – such as in Walden. The essay will close with a brief reading of Thoreau’s text that illustrates how its ethical framing emerges out of, and indexes, everyday forms of settler feeling shaped by state policy but not directly continuous with it. 1. The figure of the vanishing Indian still remains prominent within US popular and scholarly discourses, both explicitly and implicitly. Within this narrative, Native peoples may have had prior claims to the land, but they, perhaps tragically, were removed from the area, or died out, or ceased to be “really” Indian, or simply disappeared at some point between the appearance of the “last” one and the current moment, whenever that may be.4 As against this tendency, scholars who seek to track the workings of settler colonialism face an entrenched inattention to the ways non-Native conceptions and articulations of personhood, place, property, and political belonging coalesce around and through the dispossession of Native peoples and normalization of (the) settler (-state’s) presence on Native lands. Insistence on the systemic quality of such settler seizures, displacements, identifications responds to this relative absence of acknowledgment by emphasizing its centrality and regularity, arguing that the claiming of a naturalized right to Indigenous place lies at the heart of non-Native modes of governance, association, and identity. However, such figurations of the pervasive and enduring quality of settler colonialism may shorthand its workings, producing accounts in which it appears as a fully integrated whole operating in smooth, consistent, and intentional ways across the socio-spatial terrain it encompasses. Doing so, particularly in considering the exchange between the domains of formal policy and of everyday life, may displace how settlement’s histories, brutalities, effacements, and interests become quotidian and common-sensical. Looking at three different models, I want to sketch varied efforts to systemize settler colonialism, highlighting some questions that emerge when they are read in light of issues of process and affect. In Settler Colonialism and the Transformation of Anthropology, Patrick Wolfe argues, “Settler colonies were (are) premised on the elimination of native societies. The split tensing reflects a determinate feature of settler colonization. The colonizers come to stay – invasion is a structure not an event.” 5 Offering perhaps the most prominent definition of settler colonialism, Wolfe’s formulation emphasizes the fact that it cannot be localized within a specific period of removal or extermination and that it persists as a determinative feature of national territoriality and identity. He argues that a “logic of elimination” drives settler governance and sociality, describing “the settler-colonial will” as “a historical force that ultimately derives from the primal drive to expansion that is generally glossed as capitalism” (167), and in “Settler Colonialism and the Elimination of the Native,” he observes that “elimination is an organizing principle of settler-colonial society rather than a one-off (and superceded) occurrence”, adding, “Settler colonialism destroys to replace.” 6 Rather than being superseded after an initial moment/period of conquest, however, colonization persists since “the logic of elimination marks a return whereby the native repressed continues to structure settler-colonial society” (390), and “the process of replacement maintains the refractory imprint of the native counter-claim” (389). Yet, when and how do projects of elimination and replacement become geographies of everyday non-Native occupancy that do not understand themselves as predicated on colonial occupation or on a history of settler-Indigenous relation (even though they are), and what are the contours and effects of such experiences of inhabitance and belonging? In characterizing settlement as a “structure”, “logic”, and a “will”, Wolfe seeks to integrate the multivalent aspects of ongoing processes of non-Native expropriation and superintendence, but doing so potentially sidesteps the question of how official governmental initiatives and framings become normalized as the setting for everyday non-Native being and action in ways that cannot be captured solely by reference to “the murderous activities of the frontier rabble” (392–3).

#### Don’t be fooled by the aff’s claims to anti-capitalism—all they do is trade globalist capitalist exploitation for mercantilist capitalist exploitation. Private entities don’t need to appropriate themselves if they can rely on the colonial state to do it for them.

The Interstellar Railroad, or Speculation and Shareholder Whiteness in the Space Economy Réka Patrícia Gál April 14, 2021

Indeed, **Musk has** carefully **positioned his company as a space transportation company, and has explicitly compared the SpaceX project to building the Union-Pacific Railroad — for space** (Robertson 2016). The colonial comparison is not surprising (Cowen 2020). **Proponents of space colonization have long drawn parallels to the colonization of the Americas, enthusiastically representing frontier pioneering and imperialist expansionism as imperative to US American national identity** (Billings 2007). The explicit comparison to North American railroad construction hints at a specific trend of space colonization advocacy that is focused on stimulating commercial space operations. **The industrialist argument is that just as the construction of the transcontinental railroad was best undertaken by private entrepreneurs who were incentivized by the government with land grants and subsidies, the US American government should similarly aid private entrepreneurs** **in the establishment of the New Space industry** (Mazlish 1965, Launius 2014, McCurdy 2019a). In fact, from the founding of SpaceX up to 2012, the additional government funding provided to SpaceX raised returns on investment by more than two percent--this is approximately the same return that a nineteenth century investor might have expected to gain if the railroad company they invested in received federal land grant subsidies (McCurdy 2019b, 48). **Looking at the transcontinental railroad and current space colonial initiatives in parallel can therefore provide a helpful analytic for understanding, and struggling against, such a colonial expansion.** What questions and conceptual understandings can thinking of commercial space travel alongside the transcontinental railroad generate? I am particularly interested in thinking this analogy through some of the concepts advanced by Manu Karuka in his recent monograph Empire’s Tracks (2019). Karuka argues that **the construction of the transcontinental railroad was foundational to the development of the modern US colonial state, which grew in tandem with finance capitalism and the modern corporation.** Karuka’s systematic analysis unveils two central concepts that are useful for understanding the outer spatial analogies. First, that the financial speculation accompanying the gold rush was foundational to the establishment of the settler society’s extractive social order. And second, that the logic of corporate shareholding has served, and continues to serve, as the core vehicle upholding the white supremacist social order. While SpaceX stocks are not publicly available yet, numerous venture capital firms have invested in the aerospace company, with some key investors being Peter Thiel’s Founders Fund, Google, and the Bank of America (McCurdy 2019a). **A landscape of speculation enfolds over the lonesome weightlessness of outer space as these powerful companies are investing towards capitalizing on future shareholding profits.** A future, which has been called into question by numerous people, because, as Shannon Stirone has put it simply: “Mars is a hellhole. [...] Mars will kill you.” Stirone explains that Mars has a very thin atmosphere and no magnetic field, which means that it has extremely high radiation, and no breathable air. All the while, the surface of the planet is −63 °C, and dust storms are extremely common. These concerns, however, continue to be ignored in favor of high-risk investment. The corporate expansion into outer space is coated in a language of equality – of providing equal access to the wonders of outer space for all. An example of this is the recent private mission into space entitled Inspiration4, which developed in cooperation with the online payments startup Shift4Payments, and is currently raffling a seat to a random winner. The lottery acts as aspirational evidence of equal opportunity: Musk claims that these private missions are necessary to eventually make it possible for “everyone” to go to space (Chang, 2021). But **Musk’s vision of making space travel affordable through economies of scale can only be made possible by creating initial demand through aspirational marketing. Just as railroad companies, aided by government grants and loosened regulations, facilitated the westward expansion of European colonists over Indigenous lands, so ought the colonization of Mars create a pastoral utopia in which inspiration and creativity for all abound.** Exactly how a trip to a Martian colony could be paid by anyone was revealed in recent Tweets by Musk in which he has reinvented indentured servitude for extraplanetary colonization (McKay 2020). **Territorial expansion, based on financial speculation, facilitated by corporations and using unfree imported laborers is exactly what Karuka unveils about the logics of railroad colonialism**. He explains, As investors became increasingly disconnected from the sources of their revenue, financial profits seemed to arise through agreements between individuals, seemingly separated from, even independent of, the sweat of specific bodies in specific places. With the maturation of the modern corporation in the wake of emancipation, investors imagined financial accumulation as autonomous from labor, whiteness as autonomous from blackness and indigeneity. (2019, 150) Here I want to hone in on Karuka’s key concept of shareholder whiteness. Karuka explains that slaveholders maintained their economic advantages after the emancipation of slaves by excluding Black people, the Chinese workers who constructed the railroad, and the Indigeous peoples whose lands they occupied, from corporate ownership. According to Karuka, “**Racism is an effect, not a cause, of imperialism**. [...] Whiteness is fiction, not a biological reality, [...] Finance capital and whiteness ripened through a historical elaboration of relationships between imperial corporations and colonial states, forging and sustaining continental imperialism” (Karuka 2019, 150). The extension into the cosmos has already been theorized by scholars as a way to allow for the unfettered continuation of capitalist accumulation, and the New Space companies of the last decade have repeatedly claimed humanity’s extension into the cosmos as an inevitable consequence of “progress” (Dickens 2007; Valentine 2012; Klinger 2017). **With little left on Earth to be financialized, companies are turning outer space itself into an asset. I could hardly think of a better example of fictitious capital that would produce such profound alien-ation from the act of production**. Whether we are thinking of asteroid mining, space settlements, or simply private space voyages, the shareholders are, and will continue to be, removed from production on our planet, but will in the event of space colonization also be separated from it by several atmospheric layers, hatches, pressurized rooms, and spacesuits. Karuka writes, **“the future of the corporation presupposes the future of the colonial state, and the law of the corporation colonizes the future”** (2019, 153), and his analysis of the role of the modern corporation in the establishment of the US colonial state proves to be an entirely-too fitting prediction of a future neoliberal space dystopia**. The particular colonial expansion perpetrated through the railroad was achieved through “blending the economic and military functions of the state”** (Karuka 2019, xiv). The policing of racial and territorial borders was at the heart of imperial expansion as the colonizing states guarded reservation borders as sites of containment. **It also allowed the states to enforce the rules of colonial market relations on occupied Indigenous lands. To this day, the militaries of the US naval empire serve the vital functions of presenting their interests at sea. This produces another apt analogy when we consider the same mercantilist logic is being extended into space with the recent development of the United States Space Force, a new branch of the Armed Forces that is meant to facilitate, and ultimately guard, the supremacy of the United States in outer space.** **Rather than produce a new world or a vastly different future, interstellar-railroad-colonialism seems to aim, at best, to re-entrench and, at worst, to** exacerbate **the ongoing inequalities that exist on Earth**. This is especially true for conditions produced in and through colonial relations. Space exploration is explicitly settler-colonial**.** It projects the same logic of terra nullius into outer space that was used as a justification for the appropriation and colonization of the North American lands that were inhabited by various Indigenous nations, while also reproducing existing colonial relations on Earth through the expansion of space colonization infrastructure. For example, the observatories, telescopes, and other space exploration related buildings continue to be erected on Indigenous lands all over Earth, from Hawaiʻi, through French Guiana all the way to Aolepān Aorōkin Ṃajeḷ (Marshall Islands) (Smiles 2020; Prescod-Weinstein et al. 2020; Durrani 2019). As his Tweet about indentured servitude in space shows, Musk is already counting on the extension of the (likely racialized) material exploitative practices from Earth to outer space. But this is also the one major difference between railroad colonialism and space colonization: while the colonial expansion in North America was articulated as the colonizing European’s ongoing fight against the sovereignty of the Indigenous peoples of Turtle Island**, the fight over territory in outer space might not be fought against extraterrestrial natives. Instead, it will likely continue to be fought against the sovereignty of Indigenous peoples on Earth, and in space, against other spacefaring nations, such as China and India.** As such, what remains open for me is to what extent shareholder whiteness remains the same, or transforms with this move of the corporation into outer space. Will whiteness remain the currency of the future, or will the shareholder privilege of the future turn towards something else, something new yet equally insidious? How does shareholder whiteness function under a global economy? And more importantly, what tools for resistance can we learn from those who struggled against colonial expansion and specifically, the transcontinental railroad? Can we break with the logics of finance capital, empire, and whiteness in interstellar space, and speculate towards a better future?

#### The evocation of common heritage of “mankind” always excludes those who are the constitutive excluded—mechanisms like the Moon treaty purport to be for the good of common humanity, but they in fact just reinforce the nation-state’s ability to make sovereign decisions over space. Cornum 18,

Cornum, Lou. “Event Horizon.” *Real Life Mag*, 12 Mar. 2018, https://reallifemag.com/event-horizon/.

The word *pioneer*, usually attached to innovation, is never too far from people like Jeff Bezos or Elon Musk or Peter Thiel. These men’s careers in tech startups, their origins in the digital commerce boom, and their pioneer identities were forged on the electronic frontier. Like pioneers of industry in the colonial expansion of the Americas, these men operate on the knife’s edge of sovereignty as it cuts a path for both state and capital to consolidate power. In space, these men see a chance to loosen further the bonds that still restrain the endless capital they’ve been chasing in their imagined rocket ships. Investors, architects of the financial and material future, have taken to using the term “NewSpace” to refer to the almost accessible ventures of asteroid mining, space shipping, spaceship travel, and other forms of space commerce. Still, there are fminor contractual obstacles. **Even at the void’s edge, there is a treaty.** A couple of treaties actually. **Out there the governments still rely on these dusty remnants of the dying beast of nation-state sovereignty and the apparatuses of international relations first created to aid and abet the global distribution of white men’s control. The Outer Space Treaty of 1967, which has a more precise formal name** — Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies — **may seem surprisingly benevolent. It is sometimes summarized as saying that *nobody can own space*. But while it outlaws national appropriation, it allows incorporation without the state.** In a demotion from the sensual feel of its phrasing, “celestial bodies” become the body politic, managed sites of bans and requirements. While the U.S. did sign the Outer Space Treaty of 1967, it did not sign the 1979 Moon Treaty**,**more formally known as the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies. The Moon Treaty, among other directives, bans any state from claiming sovereignty over any territory of celestial bodies; bans any ownership of any extraterrestrial property by any organization or person, unless that organization is international and governmental; and requires an international regime be set up to ensure safe and orderly development and management of the resources and sharing of the benefits from them. It also bans military activity such as weapons testing or the founding of extraterrestrial military bases (though it’s hard to see U.S. presence anywhere in the stars or on Earth as anything other than militaristic). **Evoking the common heritage of “mankind,” the Moon Treaty could appear a pie-in-the-sky attempt at more equitable relations to land than have been established on Earth since the advent of private property and national borders. But it is of course expressed only in the stop-gap measure of treaties that assign power to states, governments, and resource-management regimes. The power of the treaty is in its possible revoking. In making the decision to sign the treaty or not sign the treaty, the collectives state their unquestioned right to make decisions in space at all. Space is a place where old and new sovereignties, like asteroids desired for mining, are colliding or sometimes colluding. There is a line connecting the Dutch East India Company, the Hudson Bay Company, and SpaceX. These companies begin as corporate endeavors, but then as now the nation-state is sticky: It finds a way to adhere.** Take the case of Luxembourg, a polity that lives on tax loopholes (allowing large corporations to move money in and out of the nation with utmost secrecy and minimal charges) where, as Atossa Araxia Abrahamian [reports for the *Guardian*](https://www.theguardian.com/news/2017/sep/15/luxembourg-tax-haven-privatise-space), private space companies are finding their funding allies for financed trips to the moon, Mars, and the interstellar spots for satellites. The mixing of business and research mixes the money and power hungering of technocrats who don’t just want to own businesses but want people to see their businesses as the shareholders of humanity’s future.In middle school we didn’t have model U.N., but we did have model Earth. For field trips we’d be taken away to Biosphere 2, a site for space-colonization experiments built by Space Biosphere Ventures but owned by Columbia University by the time I visited. In these field trips to the desert outside a town auspiciously named Oracle, we walked around the display vivarium, always being reminded to call it biosphere *two*— biosphere *one* was the earth outside, the one we had momentarily left behind and one day might leave behind for good. That old planet was a past prototype. But the new prototype was itself already a defunct research facility. The closed-system experiment with human subjects had failed twice in the ’90s, and it now rests as one of the many dreams littering the desert of a new world.When a world is new, it creates alongside a space held for the older worlds. This is the drama between what can be brought from before and what will be made anew. It is why Aeneas carried his dying father Anchises on his shoulders out of Troy on his way to found Rome. The traveler always brings baggage. Jeff Bezos would like to be the one who carries that baggage to space or controls the robots and poorly paid temporary laborers who accomplish the carrying. In this supposedly new space, the regimes of inequality will be quite familiar. The space-goers insist it is something called humanity, with the ingrained hierarchical legacies of this category, that will be going.Leaders in industry who have always wanted to be world leaders are now positioning themselves as leaders of outer worlds. Elon Musk makes union busting seem like a cosmic necessity for the continuation of human life. The material and subsequent cultural valorization of certain kinds of work in the tech industry, wherein the “great minds” make all the money and those who maintain the machinery of day-to-day existence are treated like the shit they’re supposed to take, does not end at the stratosphere.Even the more lofty moral considerations of outer-space ethics (e.g., is terraforming ever morally acceptable?) often ignore their fundamental basis in deathly processes still very much situated on Earth. Any outer-space endeavor today or in the near future will be an extension of the life-destroying capacities of capitalists and their colonial countries. On the [Deep Space Industries page](https://deepspaceindustries.com/mining/) for asteroid mining, the exploitation and extraction of minerals is heralded as “an unlimited future for all mankind**.” The endless extension of capitalist accumulation comes with an extension of this delusion of “all mankind.” As if all such projects, the project of humanity itself, has not always been an exclusionary one.** SETI may appear to inhabit a different realm of speculation than that of the grandstanding services-and-commodities pioneers. But its project also follows a willful ignorance about human history and the exclusions that make humanity as a class possible. SETI proponents, much like Musk and his ilk, view themselves at the forefront of a new breakthrough not necessarily of capital but of knowledge. Their sites of expansion are not centered so much on the territories capital requires in order to enclose, privatize, and extract until depletion (though they can be intimately connected, as in the development of the university and research centers as global actors of dispossession), but on sites of encounter. Outer-space commerce and funded extraterrestrial contact-seekers operate on and reinforce damaging notions of land, life, and the future that actually hinder the survival of most Earth dwellers rather than provide anything like meaningful hope. Stories of contact are only ever understood as colonial stories. Every inquiry of future contact with extraterrestrial life, from academic and government-funded to amateur and whimsical, relies on the same stale comparisons of colonial conquest. Columbus, of course; Captain James Cook, often. Every episode of the podcast *Making New Worlds: Why Are We Going?*features historical authorities commenting on colonial situations of the past and comparing them to hypothetical situations with extraterrestrials. The topics convened by those who are granted the authority to speak on them are conducted under the tyranny of certain givens, the most persistent and damning of them being contact as conquest.

#### The alternative is engagement in indigenous space futurism, the active imagination of future worlds free from colonialism. This enables us to frame future movements against the settler colonialist state while going against dominant settler discourse in the debate space. The perm is impossible since the aff bans private appropriation – indigenous individuals can’t launch rockets and get off the rock. The aff subsumes space with the state, Cornum 15.

Cornum, Lou. “The Space NDN's Star Map.” *The New Inquiry*, 26 Jan. 2015, https://thenewinquiry.com/the-space-ndns-star-map/.

**For indigenous futurism**, technology is inextricable from the social. **Human societies are part of a network of wider relationships with objects**, animals, geological formations and so on. **To grasp our relationship with the non-human world here on Earth, we must also extend our understanding of how Earth relates to the entirety of the cosmos.** We live on just one among millions of planets, each an intricate and delicate system within a larger, increasing complex structure. For the indigenous futurist endeavor, striving to understand the ever-multiplying connections linking us to the beginning of the universe and its constant expansion also entails unraveling the intricate relations that make up our Earthly existence. Zainab Amadahy, who identifies as a person of mixed black, Cherokee and European ancestry, grounds her writing practice in illuminating and understanding networks of relationships: “I aspire to write in a way that views possible alternatives through the lens of a relationship framework, where I can demonstrate our connectivity to and interdependence with each other and the rest of our Relations.” **Her** 1992 novel ***The Moons of Palmares*** examines the relationships, both harmful and collaborative, between indigenous peoples and descendants of slaves in an outer space setting that merges histories of the Black Atlantic with the colonial frontier. In a provocative bit of plotting, she casts an indigenous character, Major Eaglefeather, as an oppressive foreign force in the lives of an outer space labor population that has shaped its society in remembrance of black slave resistance in North/South America and the Caribbean. The story **follows Major Eaglefeather’s decision to reject his ties to the corporate state and support a rebel group of laborers**. The name Palmares is taken from a real-world settlement founded by escaped slaves in 17th-century Brazil, which is also known to have incorporated indigenous peoples and some poor, disenfranchised whites. In a chronicle written in the late 17th century, these *quilombos* are described as networks of settlements that lived off the land and were supplemented by raids on the slave plantations where the inhabitants were formerly held**. It is said that in Palmares the king was called Gangasuma, a hybrid term meaning “great lord” composed of the Angolan or Bandu word *ganga* and the Tupi word *assu*. The word succinctly captures the mixture of cultures that banded together in Palmares to live together on the margins of a colonialist, slave-holding society. While Palmares was eventually destroyed in a military campaign, it lives on as a legend of slave rebellion and utopian possibility that Amadahy finds well suited for her outer space story about collaborative resistance to state power and harmful resource extraction processes. Outer space, perhaps because of its appeal to our sense of endless possibility, has become the imaginative site for re-envisioning how black, indigenous and other oppressed people can relate to each other outside of and despite the colonial gaze.** Amadahy’s work is crucial for a critical understanding of the space NDN. **The space NDN cannot allow him or herself to fall into the patterns of domination and kyriarchy that have for too long prevailed here on Earth as well as speculative narratives of outer space. Afrofuturists have looked to space as the site for black separatism and liberation. If the space NDN is truly committed to being responsible to all our relations, it is imperative for our futurist vision to be in solidarity with and service to our fellow Afrofuturist space travelers. Our collective refusal of colonial progress (namely, our destruction) means we must chart other ways to the future that lead us and other oppressed peoples to the worlds we deserve.** *The Moons of Palmares* works toward this end by revealing the strong connections between indigenous and black histories, narratives and ways of living. **Indigenous futurism is indebted to Afrofuturism: Both forms of futurism explore spaces and times outside the control of colonial powers and white supremacy.** These alternative conceptions of time reject the notion that all tradition is regressive by narrating futures intimately connected to the past. SF and specifically the site of outer space give writers and thinkers the imaginative room to envision political and cultural relationships and the future decolonizing movements they might nourish. This focus on relationship, especially as posited by Amadahy, also accounts for those forms of indigeneity that persist among peoples either stolen from their lands or whose lands have been stolen from them. As the writer Sydette Harry recently posted on Twitter, “Black people are displaced indigenous people.” However, because of the processes of forced relocation and slavery and continuing anti-black racism, black people are often denied claims to indigeneity. There is also a pernicious erasure of black NDNs in America and Canada. **In exploring outer space, black authors are also able to assert their own relationship to land both on Earth and in the cosmos.** The Black Land Project (BLP), while not an explicitly futurist organization, fosters the kind of relationships to land on Earth that futurist authors and thinkers envision in outer space. In a recent podcast, *Blacktracking through Afrofuturism*, BLP founder and director Mistinguette Smith discusses how walking over the routes of the Underground Railroad brought forth alternate dimensions and understandings of time outside the settler paradigm of ownership. These are aspects of relating to land that the Afrofuturist and the space NDN (identities which can exist in the same person) bring with them on their travels. This focus on relationship rather than a strict idea of location speaks to the way in which the space NDN can remain secure in their indigenous identity even while rocketing through dark skies far from their origins. This is not to demean the work of land protectors and defenders who risk serious repercussions for resisting corporate and state encroachment on indigenous territories. The space NDN supports those who are able and choose to remain on the land, while also hoping to broaden understandings of indigeneity outside simple location. **Locations of course are never simple. It is the settler who wishes to flatten the relation between place and people by claiming land through ownership. Projecting themselves forward into faraway lands and times, the space NDN reveals the myriad ways of relating to land beyond property.**

#### The role of the ballot is to center indigenous scholarship and resistance-- Any ethical commitment requires that the aff place themselves in the center of Native scholarship and demands.

Carlson 16

(Elizabeth Carlson, PhD, is an Aamitigoozhi, Wemistigosi, and Wasicu (settler Canadian and American), whose Swedish, Saami, German, Scots-Irish, and English ancestors have settled on lands of the Anishinaabe and Omaha Nations which were unethically obtained by the US government. Elizabeth lives on Treaty 1 territory, the traditional lands of the Anishinaabe, Nehiyawak, Dakota, Nakota, and Red River Metis peoples currently occupied by the city of Winnipeg, the province of Manitoba, (2016): Anti-colonial methodologies and practices for settler colonial studies, Settler Colonial Studies, DOI: 10.1080/2201473X.2016.1241213, JKS)

Arlo Kempf says that ‘where anticolonialism is a tool used to invoke resistance for the colonized, it is a tool used to invoke accountability for the colonizer’.42 Relational accountability should be a cornerstone of settler colonial studies. I believe settler colonial studies and scholars should ethically and overtly place themselves in relationship to the centuries of Indigenous oral, and later academic scholarship that conceptualizes and resists settler colonialism without necessarily using the term: SCT may be revelatory to many settler scholars, but Indigenous people have been speaking for a long time about colonial continuities based on their lived experiences. Some SCTs have sought to connect with these discussions and to foreground Indigenous resistance, survival and agency. Others, however, seem to use SCT as a pathway to explain the colonial encounter without engaging with Indigenous people and experiences – either on the grounds that this structural analysis already conceptually explains Indigenous experience, or because Indigenous resistance is rendered invisible.43 Ethical settler colonial theory (SCT) would recognize the foundational role Indigenous scholarship has in critiques of settler colonialism. It would acknowledge the limitations of settler scholars in articulating settler colonialism without dialogue with Indigenous peoples, and take as its norm making this dialogue evident. In my view, it is critical that we not view settler colonial studies as a new or unique field being established, which would enact a discovery narrative and contribute to Indigenous erasure, but rather take a longer and broader view. Indigenous oral and academic scholars are indeed the originators of this work. This space is not empty. Of course, powerful forces of socialization and discipline impact scholars in the academy. There is much pressure to claim unique space, to establish a name for ourselves, and to make academic discoveries. I am suggesting that settler colonial studies and anti-colonial scholars resist these hegemonic pressures and maintain a higher anti-colonial ethic. As has been argued, ‘the theory itself places ethical demands on us as settlers, including the demand that we actively refuse its potential to re-empower our own academic voices and to marginalize Indigenous resistance’.44 As settler scholars, we can reposition our work relationally and contextually with humi- lity and accountability. We can centre Indigenous resistance, knowledges, and scholarship in our work, and contextualize our work in Indigenous sovereignty. We can view oral Indigenous scholarship as legitimate scholarly sources. We can acknowledge explicitly and often the Indigenous traditions of resistance and scholarship that have taught us and pro- vided the foundations for our work. If our work has no foundation of Indigenous scholarship and mentorship, I believe our contributions to settler colonial studies are even more deeply problematic.

## 2 – REM PIC

#### CP Text: States, except the United States, should ban all forms of appropriation of outer space other than mining – they should enable rockets to leave Earth if for the purpose of private asteroid mining. The United States should fund the appropriation of outer space for the mining of rare earth metals from asteroids by private entities. It’s competitive since the aff’s ban on rocket launches means mining is impossible – no private rocket launches, no private mining.

#### Private mining is happening now:

**Gilbert 21** (Alex gilbert, complex systems researcher and a PhD student in space resources at the Colorado School of Mines. “Mining in Space is Coming” <https://www.milkenreview.org/articles/mining-in-space-is-coming> April 26, 2021)DR 22

**Space exploration is back**. after decades of disappointment, a combination of better technology, falling costs and a rush of competitive energy fromthe private sector has put space travel front and center. Indeed, many analysts (even some with their feet on the ground) believe that commercial developments in the space industry may be **on the cusp** of starting the largest resource rush in history: mining on the Moon, Mars and asteroids.

While this may sound fantastical, some baby steps toward the goal have already been taken. Last year, NASA awarded contracts to four companies to extract small amounts of lunar regolith by 2024, effectively **beginning** the [era of commercial space mining](https://payneinstitute.mines.edu/wp-content/uploads/sites/149/2020/09/Payne-Institute-Commentary-The-Era-of-Commercial-Space-Mining-Begins.pdf). Whether this proves to be the dawn of a gigantic adjunct to mining on earth — and more immediately, a key to unlocking cost-effective space travel — will turn on the answers to a host of questions ranging from what resources can be efficiently.

As every fan of science fiction knows, the resources of the solar system appear virtually unlimited compared to those on Earth. There are whole other planets, dozens of moons, thousands of massive asteroids and millions of small ones that doubtless contain humungous quantities of materials that are scarce and very valuable (back on Earth). Visionaries including Jeff Bezos [imagine heavy industry moving to space](https://www.fastcompany.com/90347364/jeff-bezos-wants-to-save-earth-by-moving-industry-to-space) and Earth becoming a residential area. However, as entrepreneurs look to harness the riches beyond the atmosphere, access to space resources remains tangled in the realities of economics and governance.

Start with the fact that space belongs to no country, complicating traditional methods of resource allocation, property rights and trade. With limited demand for materials in space itself and the need for huge amounts of energy to return materials to Earth, creating a viable industry will turn on major advances in technology, finance and business models.

That said, there’s no grass growing under potential pioneers’ feet. Potential economic, scientific and even security benefits underlie an emerging [geopolitical competition](https://nationalinterest.org/feature/geostrategic-importance-outer-space-resources-154746) to pursue space mining. The **U**nited **S**tates is rapidly emerging as a front-runner, in part due to its ambitious Artemis Program to lead a multinational consortium back to the Moon. But it is also a leader in creating a **legal infrastructure for mineral exploitation**. The United States has adopted the world’s first spaceresources law, **recognizing** the property rights of private companies and individuals to materials gathered in space.

However, the **U**nited **S**tates is **hardly alone**. Luxembourg and the United Arab Emirates (you read those right) are racing to codify space-resources laws of their own, hoping to attract investment to their entrepot nations with business-friendly legal frameworks. China reportedly views space-resource development as a national priority, part of a strategy to challenge U.S. economic and security primacy in space. Meanwhile, Russia, Japan, India and the European Space Agency all harbor space-mining ambitions of their own. Governing these emerging interests is an outdated treaty framework from the Cold War. Sooner rather than later, we’ll need [new agreements](https://issues.org/new-policies-needed-to-advance-space-mining/) to facilitate private investment and ensure international cooperation.

What’s Out There

Back up for a moment. For the record, space is already being heavily exploited, because space resources include non-material assets such as orbital locations and abundant sunlight that enable satellites to provide services to Earth. Indeed, satellite-based telecommunications and global positioning systems have become indispensable infrastructure underpinning the modern economy. Mining space for materials, of course, is another matter.

In the past several decades, planetary science has confirmed what has long been suspected: celestial bodies are potential sources for dozens of natural materials that, in the right time and place, are incredibly valuable. Of these, water may be the most attractive in the near-term, because — with assistance from solar energy or nuclear fission — H2O can be split into hydrogen and oxygen to make rocket propellant, [facilitating **in-space refueling**](https://www.theverge.com/2018/8/23/17769034/nasa-moon-lunar-water-ice-mining-propellant-depots). So-called “rare earth” metals are also potential targets of asteroid miners intending to service Earth markets. Consisting of 17 elements, including lanthanum, neodymium, and yttrium, these critical materials (most of which are today mined in China at great environmental cost) are required for electronics. And they loom as bottlenecks in making **the transition from fossil fuels** to renewables backed up by battery storage.

The Moon is a prime [space mining target](https://theconversation.com/mining-the-moon-110744). Boosted by NASA’s mining solicitation, it is likely the first location for commercial mining. The Moon has several advantages. It is relatively close, requiring a journey of only several days by rocket and creating communication lags of only a couple seconds — a delay small enough to allow remote operation of robots from Earth. Its low gravity implies that relatively little energy expenditure will be needed to deliver mined resources to Earth orbit.

The Moon may look parched — and by comparison to Earth, it is. But recent probes have confirmed substantial amounts of water ice lurking in [permanently shadowed craters](http://lroc.sese.asu.edu/posts/1105) at the lunar poles. Further, it seems that solar winds have implanted significant deposits of helium-3 (a light stable isotope of helium) across the equatorial regions of the **Moon**. Helium-3 is a potential fuel source for second and third-generation fusion reactors that one hopes will be in service later in the century. The isotope is packed with energy (admittedly hard to unleash in a controlled manner) that might augment sunlight as a source of clean, safe energy on Earth or to power fast spaceships in this century. Between its water and helium-3 deposits, the Moon could be the resource stepping-stone for further solar system exploration.

Asteroids are another near-term [mining target](https://foreignpolicy.com/2016/04/28/the-asteroid-miners-guide-to-the-galaxy-space-race-mining-asteroids-planetary-research-deep-space-industries/). There are all sorts of space rocks hurtling through the solar system, with varying amounts of water, rare earth metals and other materials on board. The asteroid belt between the orbits of Mars and Jupiter contains most of them, many of which are greater than a kilometer in diameter. Although the potential water and mineral wealth of the asteroid belt is vast, the long distance from Earth and requisite travel times and energy consumption rule them out as targets in the near term.

Wannabe asteroid miners will thus be looking at smaller near-Earth asteroids. While they are much further away than the Moon, many of them could be reached using less energy — and some are even small enough to make it technically possible to tow them to Earth orbit for mining.

Space mining may be essential to crewed [exploration missions to Mars](https://www.sciencedirect.com/science/article/abs/pii/S0032063319301618). Given the distance and relatively high gravity of Mars (twice that of the Moon), extraction and export of minerals to Earth seems highly unlikely. Rather, most resource extraction on Mars will focus on providing materials to supply exploration missions, refuel spacecraft and enable settlement.

Technology Is the Difference

The prospects for space mining are being driven by **tech**nological **advances** across the space industry. The rise of reusable rocket components and the now-widespread use of **off-the-shelf parts** are lowering both [launch and operations costs](https://aerospace.csis.org/data/space-launch-to-low-earth-orbit-how-much-does-it-cost/). Once limited to government contract missions and the delivery of telecom satellites to orbit, private firms are now emerging as leaders in developing “[NewSpace](https://www.sciencedirect.com/science/article/pii/S0094576519313451" \t "_blank)” activities — a catch-all term for endeavors including orbital tourism, orbital manufacturing and mini-satellites providing specialized services. The space sector, with a market capitalization of $400 billion, could grow to [as much as $1 trillion](https://milkeninstitute.org/videos/infinity-and-beyond-business-space) by 2040 as private investment soars.

#### However, in order for asteroid mining to take place, private entities need to be allowed to appropriate. The plan prevents that

**Meyers 15** Meyers, Ross. J.D. candidate at the University of Oregon Law School. "The doctrine of appropriation and asteroid mining: incentivizing the private exploration and development of outer space." Or. Rev. Int'l L. 17 (2015): 183. Italics in original. [Quality Control]

The **doctrine of appropriation** is a reasonable rule for adjudicating asteroid claims, and it could **easily be modified to apply to asteroid mining**. In the context of water rights, the doctrine of appropriation requires that the claimant be a landowner in order to claim the right to use a water source. It does not make sense, however, for the international community to grant complete ownership over asteroids toa single entity, so the landowner requirement of the rule should be removed. A similar modification would need to be made to the "beneficial use" language of the doctrine. In the context of water rights, an appropriator obtains rights only to water that he or she can reasonably put to beneficial use. The metals contained in asteroids have a high level of marketability. For that reason, a mining entity could potentially put any amount of obtained metal to beneficial use, in the sense that the resources can be sold. This, however, would defeat the purpose of the rule, which is to limit such unreasonable claims. To ameliorate this problem, the doctrine of appropriation could be modified to define "beneficial use "constructively by providing that beneficial use is assumed for any resources that have been removed from the asteroid that the mining entity can reasonably hope to transport to market in a return journey. With the **astronomical cost** of undertaking a trip to such an asteroid, this modification would limit mining entities to only what they can carry back, thereby leaving the untapped resources available to other entities capable of making the same trip. Considering the size and profitability of metal deposits on asteroids, this modification to the doctrine of appropriation would **not be overly burdensome to corporate interests**. At the same time, it would **satisfy the economic imperative of promoting the rapid development of asteroid resources.** There is no doubt that asteroids may be **extremely beneficial to mankind,** both as a **source of resources** and as a jumping-off point to **far off locations in space**. The human-race has progressed scientifically and technologically to the point that space travel is within commercial reach, and the need for new international laws governing the ownership of space has never been more apparent. The Outer Space Treaty of 1968made great strides in developing rational rules for space and many of its provisions should be maintained in their original form. However, by allowing ownership of asteroids under the doctrine of **appropriation**, the international community can **incentivize the exploration and development of space in a way that reflects the needs of society in general**, **without vesting an absolute monopoly in a single entity.** The doctrine of appropriation helped drive American westward expansion, and its application to space mining would help drive the human race in its expansion into the space, the final frontier.

#### Asteroid mining solves, Ravisetti 21:

Monisha Ravisetti covers all things science at CNET. On a separate note, she plays a ton of online chess and is a fan of overly complicated sci-fi movies., Oct 4, 2021, “Rare asteroids near Earth may contain precious metals worth $11.65 trillion” <https://www.cnet.com/news/rare-asteroids-near-earth-may-become-targets-for-space-mining/> //LHP AV

Scientists just calculated that one of two metallic **asteroids** floating **in Earth's vicinity may contain precious metals worth about $11.65 trillion**. **The expensive nugget, in fact, could boast more iron, nickel and cobalt than the entirety of our global metal reserves**. Called metal-rich near-Earth asteroids, these rare, hefty mineral deposits measure over a mile wide. The one reckoned to be a metal motherlode is labeled 1986 DA, and the other, 2016 ED85**. The duo "could be possible targets for asteroid mining in the future,"** according to the new analysis published Friday in The Planetary Science Journal. **Space mining has gained traction in the scientific community because experts believe the feat could provide cost-effective metals for a lunar or Mars-based colony**, ultimately extending humanity's reach in exploring space. With a cosmic mine, building materials wouldn't have to withstand the expensive shuttle from Earth to space.

#### Counterplan solves warming – climate solutions rely on REMs, Arrobas et al 17:

Arrobas et al 17 [(Daniele La Porta Arrobas is a senior mining specialist with the World Bank based in Washington DC and has degrees in Geoscience and Environmental Management, Kirsten Hund is a senior mining specialist with the Energy and Extractives Global Practice of the World Bank and holds a Master’s in IR from the University of Groningen in the Netherlands, Michael Stephen McCormick, Jagabanta Ningthoujam has an MA in international economics and international development from JHU and a BS in MechE from Natl University of Singapore, John Drexhage also works at the Intl Institute for Sustainable Development) “The Growing Role of Minerals and Metals for a Low Carbon Future,” World Bank, June 30, 2017, <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/207371500386458722/the-growing-role-of-minerals-and-metals-for-a-low-carbon-future>] TDI

* Full report - https://documents1.worldbank.org/curated/en/207371500386458722/pdf/117581-WP-P159838-PUBLIC-ClimateSmartMiningJuly.pdf

Climate and greenhouse gas (GHG) scenarios have typically paid scant attention to the metal implications necessary to realize a low/zero carbon future. The 2015 Paris Agreement on Climate Change indicates a global resolve to embark on development patterns that would significantly be less GHG intensive. One might assume that nonrenewable resource development and use will also need to decline in a carbon-constrained future. This report tests that assumption, identifies those commodities implicated in such a scenario and explores ramifications for relevant resource-rich developing countries. Using wind, solar, and energy storage batteries as proxies, the study examines which metals will likely rise in demand to be able to deliver on a carbon-constrained future. Metals which could see a growing market include aluminum (including its key constituent, bauxite), cobalt, copper, iron ore, lead, lithium, nickel, manganese, the platinum group of metals, rare earth metals including cadmium, molybdenum, neodymium, and indium—silver, steel, titanium and zinc. The report then maps production and reserve levels of relevant metals globally, focusing on implications for resource-rich developing countries. It concludes by identifying critical research gaps and suggestions for future work.

#### Counterplan OWs – terrestrial mining hurts indigenous communities, Healy and Baker 21:

Jack Healy is a Colorado-based national correspondent who focuses on rural places and life outside America's “City Limits” signs. He has worked in Iraq and Afghanistan for The Times and is a graduate of the University of Missouri’s journalism school. He adopted a street cat from Baghdad and still has the scars on his hands to prove it. Mike Baker is the Seattle bureau chief, reporting primarily from the Northwest and Alaska. “As Miners Chase Clean-Energy Minerals, Tribes Fear a Repeat of the Past” Dec 27, 2021

<https://www.nytimes.com/2021/12/27/us/mining-clean-energy-antimony-tribes.html> //LHP AV

YELLOW PINE, Idaho — Net in hand, Louis Reuben waded into the frigid waters where his ancestors once fished, long before Idaho’s rivers were dammed and contaminated, before the Nez Perce were driven off their land when white miners struck gold. “**They used to** say you could **walk across the river on the backs of salmon**,” he said one rainy autumn morning as he tallied and measured the depleted stocks of young Chinook salmon that hatch in these mountain creeks. “**Now, it’s totally different. It’s devastating, if you think about it**.” President Biden came into office vowing to safeguard Native American resources like these and uphold the rights of tribes that have endured generations of land theft and broken treaties. But in the rolling headwaters of central Idaho, where mining interests have long overrun **tribal rights**, the administration’s promise **is colliding with** one of its other priorities: starting a revolution in **renewable** **energy** to confront climate change. Deep in the Salmon River Mountains, **an Idaho mining company, Perpetua Resources, is proposing a vast open-pit gold mine that would also produce 115 million pounds of antimony — an element that may be critical to manufacturing the high-capacity liquid-metal batteries of the future**. ADVERTISEMENT Continue reading the main story As it seeks the Biden administration’s approval for its mining plans on federal lands, Perpetua is waging an aggressive campaign to cast itself as an ally in a new clean-energy economy. **It says its Stibnite Gold Project would be the only American mine to produce antimony, which now largely comes from China, and would supply the metal to a Bill Gates-backed start-up that makes batteries that could one day store energy on solar-powered electricity grids.** “It’s responsible, modern mining,” Mckinsey Lyon, a Perpetua vice president, said as she led a tour up to the dormant mining site, still contaminated by decades of mining. She said Perpetua would clean up the mountainous basin while extracting “minerals our country needs for energy security.” The Biden administration has warned that **failing to expand the nation’s supply of rare-earth minerals, including antimony, could present a risk to the nation’s energy and military preparedness**. But deposits of antimony in the United States, unlike the one in Idaho, are generally small, and some of them locked away in mines that have been shuttered for decades. Perpetua has launched a Washington campaign to press its case. In Idaho, it has made direct promises of money to neighboring communities, contingent on the project’s success. Editors’ Picks ‘I Was Not Whole’: Why a Grandfather Went Back to College On ‘S.N.L.,’ Biden Urges Covid-Weary Nation to Stop Seeing ‘Spider-Man’ He Makes Tom Brady’s Offense Work ImageResidents in Yellow Pine support the proposed mine because of the employment opportunities it would bring to the area. Residents in Yellow Pine support the proposed mine because of the employment opportunities it would bring to the area.Credit...Tamir Kalifa for The New York Times ADVERTISEMENT Continue reading the main story Image Members of the Nez Perce tribe&rsquo;s Department of Fisheries Resources Management track how many male and female coho salmon have returned to Lapwai Creek. Members of the Nez Perce tribe’s Department of Fisheries Resources Management track how many male and female coho salmon have returned to Lapwai Creek.Credit...Tamir Kalifa for The New York Times The clean-energy public relations campaign is the newest threat to the Nez Perce, who for generations have watched fish populations decline and pollution rise. **Mining interests drove them out of their homelands and fouled their rivers and ancestral hunting grounds**. **For a community trying to preserve its culture and kinship with the territory, an effort that has involved millions of dollars invested in restoring fish stocks, the proposed mine represents another existential threat**. A review by **the** Environmental Protection Agency found that Perpetua’s initial **plan** for a 20-year operation **would inflict “disproportionately high and adverse impacts” on tribes**, according to a November 2020 letter from the agency, and environmental groups have warned that the mine could damage or destroy huge swaths of fish habitat. The Nez Perce are not alone. Across the American West, tribal nations are on the front lines of a new debate over how to balance the needs and costs of clean energy. **Extracting the fuels of the future is a process that is often far from clean, and just as fights over the environmental costs of oil exploration helped define the fossil fuel era**, conflicts like this one are creating the battle lines of the next energy revolution. The push to unearth new minerals presents a hard choice for the Biden administration in politically divided Western states where mining remains an important source of jobs and political power. The choices are destined to grow more challenging as commodities like lithium, copper, cobalt and antimony become more valuable, and critical to the nation’s future. Perpetua says its Idaho mine holds enough antimony to one day power a million homes using hulking batteries that would capture and release energy created by solar farms. Perpetua and its partner, the battery-maker Ambri, say the batteries would last for 20 years and lose little of their power-storing capacity over their lifetimes, potentially revolutionizing America’s power grids. But the batteries are a new technology that have yet to prove their effectiveness in the real world. And it will likely be at least another five years before any Perpetua project is able to deliver any antimony to be made into batteries. ADVERTISEMENT Continue reading the main story In the Santa Rita Mountains in Arizona, a Canadian mining company that is seeking federal approval to dig an open-pit mine over the objections of the Tohono O’odham, Pascua Yaqui and Hopi people has said its copper will provide “the key element to our green energy future.” **The tribes say the mines would damage their hunting and fishing lands, siphon scarce water and desecrate burial grounds and ceremonial sites.** In Nevada, the Fort McDermitt Paiute and Shoshone are protesting a mining company’s efforts to blast apart a dormant volcano to dig for lithium — a critical mineral used in batteries for electric cars. In the Big Sandy River Valley in Arizona, another lithium mining project could destroy a hot spring considered sacred by the Hualapai Tribe. An hour outside of Phoenix, leaders of the San Carlos Apache have been reaching out to Democratic leaders to stop a copper mining project that the tribe says would destroy a swath of sacred ground called Oak Flat. The British-Australian mining giant Rio Tinto wants to dig an underground copper mine that would create a mile-wide crater in the earth, which Apache people say would destroy land where they pray and hold four-day ceremonies to usher girls into womanhood. The Biden administration delayed the project by withdrawing an environmental review that was fast-tracked in the final days of the Trump administration. But the tribe wants the project killed. Terry Rambler, chairman of the San Carlos Apache, said he had been calling Mr. Biden and Agriculture Secretary Tom Vilsack, whose agency oversees the Tonto National Forest where the proposed mining site sits. The tribe has vested special hopes in persuading Interior Secretary Deb Haaland, the first Native American cabinet secretary, to intervene. The Biden administration already has put limits on exploration, going to court to disrupt the Pebble Mine project in Alaska and barring new oil and gas leases in Chaco Canyon in New Mexico. Other projects are also getting renewed scrutiny, but the administration has not closed any doors. Steve Feldgus, the Interior Department’s deputy assistant secretary for land and minerals management, said in a statement that the department was committed to building a clean-energy economy while also protecting communities. “We recognize that as demand for clean energy technology increases over the short- and medium-term, an increased supply of critical minerals and materials will be necessary to meet national and global climate goals,” he said. The agency will be engaging with a variety of groups, including tribes, to “ensure critical minerals production is sustainable and responsible,” he said.

#### AND PICs are good – they’re key to check back against affs with specific plans.

#### Use reasonability with a brightline of strong in round abuse on theory – anything else means people read shells with marginal offense where I could be very slightly more educational or fair, crowding out substance education since all debates devolve to theory.

#### Drop the arg – deters future abuse since I lose time spent reading the arg and enables us to get back to substance.

## Case

### Method

### Util

### Definition

#### OV they said in cx mining is a form of appropriation they ban hold them to it – even then definitions:

https://www.unoosa.org/documents/pdf/copuos/lsc/2017/symp-08.pdf

#### **Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or by any other means.**

#### “Appropriation of outer space” by private entities refers to the exercise of exclusive control of space.

TIMOTHY JUSTIN **TRAPP**, JD Candidate @ UIUC Law, **’13**, 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 i**t.”) (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

### Debris

#### Uncertainty from debris collisions creates restraint not instability.

MacDonald 16, B., et al. "Crisis stability in space: China and other challenges." Foreign Policy Institute. Washington, DC (2016). (senior director of the Nonproliferation and Arms Control Project with the Center for Conflict Analysis and Prevention)//Elmer

In any crisis that threatens to escalate into major power conflict, political and military leaders will face uncertainty about the effectiveness of their plans and decisions. This uncertainty will be compounded when potential conflict extends to the space and cyber domains, where weapon effectiveness is largely untested and uncertain, infrastructure interdependencies are unclear, and damaging an adversary could also harm oneself or one’s allies. Unless the stakes become very high, no country will likely want to gamble its well-being in a “single cosmic throw of the dice,” in Harold Brown’s memorable phrase. 96 The novelty of space and cyber warfare, coupled with risk aversion and worst-case assessments, could lead space adversaries into a situation of what can be called “hysteresis,” where each adversary is restrained by its own uncertainty of success. This is conceptually shown in Figures 1 and 2 for offensive counter-space capabilities, though it applies more generally. 97 These graphs portray the hypothetical differences between perceived and actual performance capabilities of offensive counter-space weapons, on a scale from zero to one hundred percent effectiveness. Where uncertainty and risk aversion are absent for two adversaries, no difference would exist between the likely performance of their offensive counter-space assets and their confidence in the performance of those weapons: a simple, straight-line correlation would exist, as in Figure 1. The more interesting, and more realistic, case is notionally presented in Figure 2, which assumes for simplicity that the offensive capabilities of each adversary are comparable. In stark contrast to the case of Figure 1, uncertainty and risk aversion are present and become important factors. Given the high stakes involved in a possible large-scale attack against adversary space assets, a cautious adversary is more likely to be conservative in estimating the effectiveness of its offensive capabilities, while more generously assessing the capabilities of its adversary. Thus, if both side’s weapons were 50% effective and each side had a similar level of risk aversion, each may conservatively assess its own capabilities to be 30% effective and its adversary’s weapons to be 70% effective. Likewise, if each side’s weapons were 25% effective in reality, each would estimate its own capabilities to be less than 25% effective and its adversary’s to be more than 25% effective, and so on. In Figure 2, this difference appears, in oversimplified fashion, as a gap that represents the realistic worry that a country’s own weapons will under-perform while its adversary’s weapons will over-perform in terms of effectiveness. If both countries face comparable uncertainty and exhibit comparable risk aversion, each may be deterred from initiating an attack by its unwillingness to accept the necessary risks.