## 1

**Interpretation – appropriation means claim of sovereignty. Affirmatives must only defend sovereign claims on outer space by private entities as unjust.**

**Violation: they “restrict all asteroid mining.” Mining for asteroids without claims of sovereignty is not appropriation**

**Private appropriation of extracted space resources is distinct from appropriation “of” outer space. Despite longstanding permission of appropriation of extracted resources, sovereign claims are still universally prohibited.**

Abigail D. **Pershing**, J.D. Candidate @ Yale, B.A. UChicago,**’19**, "Interpreting the Outer Space Treaty's Non-Appropriation Principle: Customary International Law from 1967 to Today," Yale Journal of International Law 44, no. 1

II. THE FIRST SHIFT IN CUSTOMARY INTERNATIONAL LAW’S INTERPRETATION OF THE NON-APPROPRIATION PRINCIPLE Since the drafting of the Outer Space Treaty, several States have chosen to reinterpret the non-appropriation principle as narrower in scope than its drafters originally intended. This reinterpretation has gone largely unchallenged and has in fact been widely adopted by space-faring nations. In turn, this has had the effect of changing customary international law relating to the non-appropriation principle. Shifting away from its **original blanket application** in 1967, States have carved out an exception to the non-appropriation principle, allowing appropriation of extracted space resources.53 This Part examines this shift in the context of the two branches of the United Nation’s customary international law standard: State practice and opinio juris. **A. State Practice** The earliest hint of a change in customary international law relating to the interpretation of the non-appropriation clause came in 1969, when the United States first sent astronauts to the moon. As part of his historic journey, astronaut Neil Armstrong collected moonrocks that he brought back with him to Earth and promptly handed off to the National Aeronautics and Space Administration (NASA) as U.S. property.54 Later, the USSR similarly claimed lunar material as government property, some of which was eventually sold to private citizens. 55 These first instances of space resource appropriation did not draw much attention, but they presented a distinct shift marking the beginning of a new period in State practice. Having previously been limited by their technological capabilities, States could now establish new practices with respect to celestial bodies. This was the beginning of a pattern of appropriation that slowly unfolded over the next few decades and has since solidified into the general and consistent State practice necessary to establish the existence of customary international law. Currently, the U.S. government owns 842 pounds of lunar material.56 There is little question that NASA and the U.S. government consider this material, as well as other space materials collected by American astronauts, to be government property.57 In fact, NASA explicitly endorses U.S. property rights over these moon rocks, stating that “[l]unar material retrieved from the Moon during the Apollo Program is U.S. government property.”5 The U.S. delegation’s reaction to the language of the 1979 Moon Agreement further cemented this interpretation that appropriation of extracted resources is a **permissible exception** to the non-appropriation clause of Article II. Although the United States is not a party to the Moon Agreement, it did participate in the negotiations.59 The Moon Agreement states in relevant part: Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or nongovernmental organization, national organization or nongovernmental entity or of any natural person.60 In response to this language, the U.S. delegation made a statement laying out the American view that the words “in place” imply that private property rights apply to extracted resources61—a comment that went **completely unchallenged**. That **all States seemed to accept this point**, even those bound by the Moon Agreement, is further evidence of a shift in customary international law.62

#### Negate –

#### 1] Limits – their interp explodes the topic to include affs about using space for any single purpose, like space-based solar power, helium and REMs on the Moon, space tourism, and climate adaptation satellites – explodes limits – topic lit is concerned with sovereignty over space and space colonization broadly, privileges the aff by stretching pre-tournament neg prep too thin and precludes nuanced case negs that rigorously test the aff

#### 2] Precision – Justifies the aff arbitrarily doing away with words in the resolution which allows affs about anything from public appropriation affs to airspace and many more which decks predictability – prefer our interp for topic relevance, the OST is the most prominent space non-appropriation agreement and topic debates should be relevant to the real world.

**Drop the debater – their abusive advocacy skewed our 1NC construction, allowing 1AR restart doesn't solve**

**Competing interps on T – A] topicality is a yes/no question, you can’t be reasonably topical B] norm-setting -- reasonability is arbitrary and invites judge intervention C] reasonability causes a race to the bottom of questionable argumentation**

## 2

#### Settler colonialism is the permeating structure of the nation-state which requires the elimination of indigenous life and land via the occupation of settlers. The appropriation of land turns Natives into ghosts and chattel slaves into excess labor.

Tuck and Yang 12

(Eve Tuck, Unangax, State University of New York at New Paltz K. Wayne Yang University of California, San Diego, Decolonization is not a metaphor, Decolonization: Indigeneity, Education & Society Vol. 1, No. 1, 2012, pp. 1-40, JKS)

Our intention in this descriptive exercise is not be exhaustive, or even inarguable; instead, we wish to emphasize that (a) decolonization will take a different shape in each of these contexts - though they can overlap - and that (b) neither external nor internal colonialism adequately describe the form of colonialism which operates in the United States or other nation-states in which the colonizer comes to stay. Settler colonialism operates through internal/external colonial modes simultaneously because there is no spatial separation between metropole and colony. For example, in the United States, many Indigenous peoples have been forcibly removed from their homelands onto reservations, indentured, and abducted into state custody, signaling the form of colonization as simultaneously internal (via boarding schools and other biopolitical modes of control) and external (via uranium mining on Indigenous land in the US Southwest and oil extraction on Indigenous land in Alaska) with a frontier (the US military still nicknames all enemy territory “Indian Country”). The horizons of the settler colonial nation-state are total and require a mode of total appropriation of Indigenous life and land, rather than the selective expropriation of profit-producing fragments. Settler colonialism is different from other forms of colonialism in that settlers come with the intention of making a new home on the land, a homemaking that insists on settler sovereignty over all things in their new domain. Thus, relying solely on postcolonial literatures or theories of coloniality that ignore settler colonialism will not help to envision the shape that decolonization must take in settler colonial contexts. Within settler colonialism, the most important concern is land/water/air/subterranean earth (land, for shorthand, in this article.) Land is what is most valuable, contested, required. This is both because the settlers make Indigenous land their new home and source of capital, and also because the disruption of Indigenous relationships to land represents a profound epistemic, ontological, cosmological violence. This violence is not temporally contained in the arrival of the settler but is reasserted each day of occupation. This is why Patrick Wolfe (1999) emphasizes that settler colonialism is a structure and not an event. In the process of settler colonialism, land is remade into property and human relationships to land are restricted to the relationship of the owner to his property. Epistemological, ontological, and cosmological relationships to land are interred, indeed made pre-modern and backward. Made savage. In order for the settlers to make a place their home, they must destroy and disappear the Indigenous peoples that live there. Indigenous peoples are those who have creation stories, not colonization stories, about how we/they came to be in a particular place - indeed how we/they came to be a place. Our/their relationships to land comprise our/their epistemologies, ontologies, and cosmologies. For the settlers, Indigenous peoples are in the way and, in the destruction of Indigenous peoples, Indigenous communities, and over time and through law and policy, Indigenous peoples’ claims to land under settler regimes, land is recast as property and as a resource. Indigenous peoples must be erased, must be made into ghosts (Tuck and Ree, forthcoming). At the same time, settler colonialism involves the subjugation and forced labor of chattel slaves, whose bodies and lives become the property, and who are kept landless. Slavery in settler colonial contexts is distinct from other forms of indenture whereby excess labor is extracted from persons. First, chattels are commodities of labor and therefore it is the slave’s person that is the excess. Second, unlike workers who may aspire to own land, the slave’s very presence on the land is already an excess that must be dis-located. Thus, the slave is a desirable commodity but the person underneath is imprisonable, punishable, and murderable. The violence of keeping/killing the chattel slave makes them deathlike monsters in the settler imagination; they are reconfigured/disfigured as the threat, the razor’s edge of safety and terror. The settler, if known by his actions and how he justifies them, sees himself as holding dominion over the earth and its flora and fauna, as the anthropocentric normal, and as more developed, more human, more deserving than other groups or species. The settler is making a new "home" and that home is rooted in a homesteading worldview where the wild land and wild people were made for his benefit. He can only make his identity as a settler by making the land produce, and produce excessively, because "civilization" is defined as production in excess of the "natural" world (i.e. in excess of the sustainable production already present in the Indigenous world). In order for excess production, he needs excess labor, which he cannot provide himself. The chattel slave serves as that excess labor, labor that can never be paid because payment would have to be in the form of property (land). The settler's wealth is land, or a fungible version of it, and so payment for labor is impossible.6 The settler positions himself as both superior and normal; the settler is natural, whereas the Indigenous inhabitant and the chattel slave are unnatural, even supernatural. Settlers are not immigrants. Immigrants are beholden to the Indigenous laws and epistemologies of the lands they migrate to. Settlers become the law, supplanting Indigenous laws and epistemologies. Therefore, settler nations are not immigrant nations (See also A.J. Barker, 2009). Not unique, the United States, as a settler colonial nation-state, also operates as an empire - utilizing external forms and internal forms of colonization simultaneous to the settler colonial project. This means, and this is perplexing to some, that dispossessed people are brought onto seized Indigenous land through other colonial projects. Other colonial projects include enslavement, as discussed, but also military recruitment, low-wage and high-wage labor recruitment (such as agricultural workers and overseas-trained engineers), and displacement/migration (such as the coerced immigration from nations torn by U.S. wars or devastated by U.S. economic policy). In this set of settler colonial relations, colonial subjects who are displaced by external colonialism, as well as racialized and minoritized by internal colonialism, still occupy and settle stolen Indigenous land. Settlers are diverse, not just of white European descent, and include people of color, even from other colonial contexts. This tightly wound set of conditions and racialized, globalized relations exponentially complicates what is meant by decolonization, and by solidarity, against settler colonial forces. Decolonization in exploitative colonial situations could involve the seizing of imperial wealth by the postcolonial subject. In settler colonial situations, seizing imperial wealth is inextricably tied to settlement and re-invasion. Likewise, the promise of integration and civil rights is predicated on securing a share of a settler-appropriated wealth (as well as expropriated ‘third-world’ wealth). Decolonization in a settler context is fraught because empire, settlement, and internal colony have no spatial separation. Each of these features of settler colonialism in the US context - empire, settlement, and internal colony - make it a site of contradictory decolonial desires7. Decolonization as metaphor allows people to equivocate these contradictory decolonial desires because it turns decolonization into an empty signifier to be filled by any track towards liberation. In reality, the tracks walk all over land/people in settler contexts. Though the details are not fixed or agreed upon, in our view, decolonization in the settler colonial context must involve the repatriation of land simultaneous to the recognition of how land and relations to land have always already been differently understood and enacted; that is, all of the land, and not just symbolically. This is precisely why decolonization is necessarily unsettling, especially across lines of solidarity. “Decolonization never takes place unnoticed” (Fanon, 1963, p. 36). Settler colonialism and its decolonization implicates and unsettles everyone.

#### Space management cannot be understood outside of settler colonialism. The infrastructure, institutions, and Eurocentric values of space policy are considered the hallmarks of science and progress, which become weaponized against Indigenous resistance.

Matson and Nunn 17

(Zannah Mae Matson is a PhD student in Human Geography at the University of Toronto, Neil Nunn is a PhD candidate in the Department of Geography and Planning at the University of Toronto, 10-3-17, SPACE INFRASTRUCTURE, EMPIRE, AND THE FINAL FRONTIER: WHAT THE MAUNA KEA LAND DEFENDERS TEACH US ABOUT COLONIAL TOTALITY, Society and Space, <https://societyandspace.org/2017/10/03/space-infrastructure-empire-and-the-final-frontier-what-the-mauna-kea-land-defenders-teach-us-about-colonial-totality/>, JKS)

Mauna Kea is a dormant volcano and the highest point on the archipelago of Hawai’i. When measured from its base at seafloor, it is the tallest mountain on earth. These towering heights, in a region of the world with minimal light pollution has also earned Mauna Kea recognition of being one of the best spots on the planet for examining the cosmos. Long before the development of modern space infrastructure, however, the peak of Mauna Kea was regarded by native Hawaiians as among the most sacred places on the archipelago of Hawai’i. The place where earth meets the heavens. These divergent perspectives are embedded within a larger relationship of imperial domination that has seeded a century of unrest. While the primary focus of the protest was to challenge a half-century disregard for this sacred site by numerous entities and interests, the Battle for Mauna Kea cannot be understood outside Hawaii’s 125 year-long history of colonial occupation. In 1893, the Hawaiian Kingdom and its Queen, Lydia Kamaka’eha Lili’uokalani, were overthrown by a US led military coup (Long, 2017). Speaking to a spirit of resistance that has existed on the islands since the coup, scholar-activist K. Kamakaoka’ilima Long (2017: 15) states: “four decades of land struggles and cultural historical recovery… have grown a Hawaiian sovereignty movement… playing out in both land defense and as a movement to re-realize Hawaiian political independence as a sovereign state.” This recent assertion of self-determination, now known as the battle for Mauna Kea, has grown to become a global movement with broad support from high-profile figures and the hashtags #Wearemaunakea, #ProtectMaunaKea, and #TMTshutdown trending widely on social media. More than just a source of inspiration for the groundswell anti-colonial movements around the world, this story provides a context to better understand ongoing colonial occupation that is reinforced through the constitutive power of space infrastructure. Working from decades of resistance that culminated in the “battle for Mauna Kea,” we engage the notion of colonial totality to conceptualize the resistance to space infrastructure and the ongoing US occupation of Hawaii, reflecting on what this movement provides for better understanding totality and the relationship between space infrastructure and the shifting nature of colonial occupation more broadly. The notion of totality describes the process by which occupied spaces are coded with Western values in the form of normalized cultures, epistemologies, and institutions that produces an “atomistic image of social existence” (Quijano, 2007: 174). The institutions, ideologies and systems that advocate for the construction of space infrastructure exemplify this process. Astronomers frame the building of the observatory infrastructure as an essential piece in advancing our knowledge of outer space and ultimately achieving ‘universal’ progress. The resistance to development of these infrastructural systems is an invitation to consider the relationship between space as a frontier of discovery and ongoing questions of settler colonialism; the blockade has made visible the inherent relationship between the infrastructure of scientific exploration and the logic of totalizing colonial rationality that enables the development of massive telescopes on occupied land. While these perspectives of colonial totality provide a useful understanding of power and institutions that shape this conflict, we suggest that the Hawaiian land defenders’ refusal of the normalizing force of space infrastructure demonstrates the complexities and conditions relating to the notion of totality and ultimately the inadequacies of the concept. During a public comment period at 2015 University of Hawai‘i Board of Regents meeting, Dr. Pualani Kanaka’ole Kanahele gestures to both the totalizing colonial discourse that suppresses her cultural beliefs and the importance of fighting back against these systems: … we believe in the word of our ancestors…they say we are the products of this land and that is our truth…and that is what we are fighting for. This is our way of life. This is not our job. We don’t earn money from doing this. But for generations after generations, we will continue to be doing what we are doing today. What Dr. Kanahele speaks of goes beyond the physical destruction of the sacred ancestral site, to describe a hegemonic normalization and occupation that actively effaces traditional Hawaiian ways of being in the world. The words and actions of the land defenders challenge totalizing structures that classify space according to a narrow set of beliefs about the world. Working from these acts of resistance, we want to suggest that the Hawaiian sovereignty movement illuminates how systems of scientific thought and the project of space exploration rely on Euro-western values being the standard by which all other values are measured. It is this wide acceptance of these structures and principles of reasoning that serve to justify the construction of infrastructure that at once reproduces and fortifies these myths. This self-reinforcing relationship between the production of space infrastructure and the logics that justify it speaks to a powerful aspects of colonial totality: the way it gains power by rendering illegible the very elements relied upon to actively produce the other. The generally unquestioned salience of space infrastructure is a powerful example of this. As Quijano (2007: 174) describes, the relationship between colonialism and scientific discourse is a mutually reinforcing and “part of, a power structure that involved the European colonial domination over the rest of the world.” In Hawai’i, we see the settler colonial process of cultural attrition operating through a totalizing force of colonial knowledge systems that extend beyond physical occupation of land to include an erasure of Indigenous Hawaiian ways of knowing. Although the spatialities and technologies associated with this form of stellar navigation are radically dissimilar, we suggest that on a basic level, this form of space exploration is continuous with a lineage of Euro-western projects of discovery. In short, space as the ‘final frontier’ is not simply a metaphor but speaks to the role of astronomy in upholding the ongoing projection of values onto new territories and extending power and acquisition of territory to those complicit in colonial processes. This extends both to the world’s highest peaks and into the heavens. Space infrastructure is central to this ongoing frontier process that seeks to code ‘new’ territories as knowable according to certain values and, as a result, casts inhabitants who fall outside this paradigm as irrational, less-than-human, and exploitable. However, as Lowe (2015: 2) warns, these abstract promises of human freedoms and rational progress are necessarily discordant with the “global conditions on which they depend.” Which is to say that these atomistic systems dispose of the very relationships and elements of life that make them possible. A belief in respecting the sacredness of the world is just one example of this. It is also essential to recognize the process of establishing colonial totality is one that imperial forces have worked tirelessly to instill. Recognizing this helps to disrupt an appearance of givenness that colonial occupation relies upon. The land defenders have been vocal about this, reminding of us of the fact that since the arrival of James Cook to the Hawaiian Islands in 1778, settler colonial campaigns have been advancing longstanding patterns of cultural removal, fueled by beliefs in colonial supremacy. Following the coup and overthrow of the Hawaiian monarchy by US-led forces, a colonial oligarchy banned Hawaiian languages from schools and formalized English as the official language for business and government relations (Silva, 2004: 2-3). This legislation eroded language, culture, and sacred practice; and is an example of what Ngũgĩ wa Thiong’o (cited in Silva, 2004: 3) describes as a “cultural bomb” of settler colonialism that serves to “annihilate a people’s belief in their names, in their languages, in their environment, in their heritage of struggle, in their unity, in their capacities and ultimately in themselves.” According to Chickasaw theorist Jodi Byrd, continually reflecting on the historical and ongoing work that maintains the conditions of settler colonialism is essential to resisting the tendency for colonial constraint to appear inevitable, unresolvable, and complete (Byrd, 2011; see also Simpson, 2014). There was nothing, easy, given, or natural about processes of colonial occupation. While we acknowledge the usefulness of totality for thinking about colonial supremacy, we have concerns about its tendency to inscribe an inaccurate depiction of Euro-western superpower with total ideological control over subjugated Indigenous population. Put differently, we are cautious of the work that the notion of totality does to reinforce a too widely accepted view of Indigenous populations as helplessly dominated, or even anachronistic. The Hawaiian sovereignty movement demonstrates that this is not the case. What the battle at Mauna Kea has shown—akin to other efforts of refusal, such as those at Standing Rock—is that the war against colonialism is ongoing. At present, it appears the land protectors have been successful in their goals of halting construction, as the development team behind the project has begun considering secondary sites for the telescope. The resistance at Mauna Kea, then, is a powerful symbol of the possibility of rupturing the normative totality of Modernist scientific rationality, but it also underscores the recalcitrance of the structures of control and the challenges of pushing back against colonial occupation. However, despite this rupturing of hegemonic ideas of science and progress through the resistance movement, the dominant response from the scientific community has been largely one of confusion and perplexity. This reaction to the uprising speaks to the power of the narratives that cement the Western framework as ‘truth,’ ‘natural,’ and ‘given.’ For these representatives of state and international institutions, violent control is re-framed as co-existence to achieve Modernist notions of progress, while the claims of Indigenous people are reduced to frivolous demands with primitive and irrational connections to the past. This, of course, exists with little consideration of the irony of how this frenzy to build infrastructure that works to “know” the cosmos may be read as equally irrational. This essay has sought to consider the relationship between infrastructure and colonialism, emphasizing that even the most futuristic space telescopes have embedded within them a lineage of Euro-western cultural supremacy. It is important to recognize the extant materiality of these infrastructures as a manifestation of hegemonic systems that perpetuate myths of rationality and Euro-western cultural supremacy. The battle for Mauna Kea movement highlights the importance of remembering the long historical processes and extensive exertion of colonial constraint and cultural removal that has been necessary to maintain control of the land. Despite the social processes that naturalize colonial infrastructure, there is nothing essential, necessary, or pre-ordained about enormous telescopes. The success of the land defenders at Mauna Kea, and the support the movement gained around the world, shows us that Euro-western forces and the infrastructure that is central to maintaining their normative influence, are replete with fissures and contradictions worth pushing against. In spite of the hegemonic forces of modernity and rationality behind the construction of the TMT and a continued attempt to assert colonial totality, the battle at Mauna Kea indicates these hegemonic forces have been far from totalizing. The colonial powers do not have the final word. The land defenders at Mauna Kea have demonstrated a powerful vision for disrupting normative ways of occupying land and knowing the cosmos inspiring us to think further on the complexities of mobilizing infrastructure to resist colonialism. It is within these ruptures that we see a potential for a continued learning from the stars and our social existence.

#### Cooperation assumes that space is a unique area that can transcend Earthly politics. This naïve assumption ignores the settler power dynamics that shape the process of cooperation.

Genovese 16

(Genovese, Taylor R. Doctoral student in the Human and Social Dimensions of Science and Technology (HSD) program at Arizona State University, where he is pursuing his interest in the social imaginaries of human futures on Earth and in outer space. 2016. “Fear and Loathing in Truth or Consequences: Neoliberalism, Colonialism and the Lineage of the Frontier at Spaceport America.” Space+Anthropology, JKS)

“This isn’t the government space age,” the tour guide continues. “This is the commercial space age. As a space corporation, you have two choices: cede the business and die...or innovate. There will be no more government hand-outs and that forces innovation.” I knew that I would be confronted with the neoliberal, capitalist mythos eventually; the NewSpace mantra of “pull yourself up by the spaceboot-straps.” However, what the tour guide said is not entirely true, considering the New Mexico General Fund Plus Special Appropriation is slated to give Spaceport America $2,262,000 in the 2017 budget. That means that 35% of the spaceport’s operating budget next year will be taxpayer money—“government hand-outs,” if you will. However, this is not a novel situation, corporate subsidies are an important tradition within the capitalist system. “Movement of people and goods is a natural progression,” preaches the tour guide. “The goal of humanity is to make the world a smaller place. Space travel can do that. For example, take what happened at Benghazi. Imagine we could deploy a SEAL team on rocket planes anywhere in the world within minutes!” I can barely take it. This is my first time visiting any NewSpace facility and—as an anthropologist—I want to remain a fly-on-the-wall for this initial visit. But the activist in me begins screaming and clawing its way up my throat. I was about to burst when a voice calls out from behind me. “OK, but wouldn’t it be great if we all worked together in space? Shouldn’t space be without a military application?” I breathe a sigh of relief as my activist personality begins to settle down. The tour guide begins with the double-speak that continues throughout the remainder of the tour. “That’s the good thing about space,” he says, floundering slightly at the tourist’s audacity to challenge corporate policy. “It transcends politics. The good thing about space is it’s a Trump- free zone. A Hillary-free zone.” Except that is obviously not true; and not just in the Foucauldian “everything is political” sense (i.e. that power dynamics exist in every facet of human interaction). Abu Dhabi’s Aabar Investments has a 37.8% stake in Virgin Galactic. SpaceX has put in unsolicited bids to launch American spy satellites. The metaphysical ideal of outer space may be a place beyond politics, but the reality in this “second space age” is that globalized capitalism—and all the politics that are inherently intertwined within it—are alive and well in the commercial space industry. The tour guide turns to the launching capabilities of the Boeing 747, especially as it pertains to Virgin Galactic’s LauncherOne program which hopes to strap a rocket to one of the wings of a 747, fly up to around 50,000 feet, and release the rocket to be launched the rest of the way to space. “Does anyone else see a problem with this photograph?” asks the tour guide—holding his iPad out for us to see— referencing the fact that there exists only one missile on one of the wings. “What about a 747 carrying missiles on both wings? What about bomb bay doors? There’s a lot of volume inside of a 747! It carried the Space Shuttle on its back, it seems like a waste to only carry a single missile.” He holds his hand flat and horizontal to us, as if his fingers are a 747 and then uses the index finger of his other hand to simulate spacecraft dropping from the belly of the aircraft—his palm. Almost a neoliberal haiku. I begin to feel sick. The tour guide continues with the double- speak. “But it’s not about spaceports. It’s not about spaceships. It’s about how can space better humanity?” We finally disembark the shuttle and head to the visitor exhibits inside of the terminal and hanger facility. A large mural—titled The Journey Upward—is adorned on one of the walls. This mural served as a summation of the NewSpace worldview and ideology. A natural, inescapable, linear progression toward human beings spreading into the cosmos: from dinosaurs (?) to Anglo-looking Paleo Indians to settler-colonists to space migration. This romanticized “lineage of the frontier” is tied to the capitalist dream—and mythology—of untold profits and constantly expanding markets. Of course, the capitalist mythology also likes to ignore the horrendous inequality and violence that tends to attach itself to the frontier mentality. When frontiers are seen as limitless, uninhabited and uncivilized, it encourages doctrines like slavery and Manifest Destiny. Yet NewSpace corporations seem to be overlooking the bigger picture and instead focus on the “glory of the frontier” as endless profit potential and romantic adventure.

#### This debate is not private space good/bad, but instead a question of Native sovereignty and the power to invoke the plan. The 1AC eclipses the authority of Native nations, so in response we affirm the long tradition of Indigenous internationalism across colonial borders.

Estes 19

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The Treaty Council, however, was not the first or only version of what historian Daniel Cobb calls a “global Indigenous identity.” Rather, it belonged to and drew from a long tradition of Indigenous internationalism.5 Prior to European contact, Indigenous nations had often entered into relations with each other for alliance, kinship, war, peace, or trade. As shown in previous chapters, agreements were made not solely between human nations, but also among nonhuman nations as well, such as the buffalo and the land. Such treaties were, and continue to be, the basis of diplomacy and the evidence of a prior and continuing status of Indigenous nationhood. Sovereign nations do not enter into international relations or treaties with domestic or “internal” populations. On the contrary, the very basis of sovereignty is the power to negotiate relationships between those who are seen as different— between other sovereigns and nations. But concepts of “sovereignty” and “nation” possess different meanings for Indigenous peoples than for their European-derived counterparts. And they are not entirely consistent, either, with the aspirations for a nation-state that came to define decolonization movements in the Third World. While doing important defensive work, on face value these Western and Third World concepts only partially reflect traditions of Indigenous resistance. Far beyond the project of seeking equality within the colonial state, the tradition of radical Indigenous internationalism imagined a world altogether free of colonial hierarchies of race, class, and nation. This vision allowed revolutionary Indigenous organizations such as the Treaty Council to make relatives, so to speak, with those they saw as different, imagining themselves as part of Third World struggles and ideologies, and entirely renouncing the imperialism and exceptionalism of the First World (while still living in it). They were in the First World but not of it—much like American Indians are in, but not entirely of, the United States. Indigenous peoples across North America and the world have fought, died, and struggled to reclaim, restore, and redefine these powerful ideas. Their goal has been to take their proper place in the family of nations. Radical Indigenous internationalism, however, predates AIM and the Treaty Council. Contemporary pan-Indigenous movements were a result of more than a decade of Red Power organizing that began in the early 1960s, nearly a decade before the creation of AIM. Earlier, in the 1950s, Flathead scholar and writer D’Arcy McNickle and the National Congress of American Indians had explored a similar intellectual and political terrain of internationalism. And before that, the Society of American Indians advocated for a seat at the table during the 1919 Paris peace talks and representation at the League of Nations. Each distinct instance posed a similar question: If Indigenous peoples are nations, why are they not afforded the right to self-determination? Two strands of thinking about self-determination for the colonial world prevailed following the First World War. In the first, US President Woodrow Wilson argued for self-determination with a limited set of rights that would not radically upset the colonial order. Such liberal internationalism, however, glaringly omitted Indigenous peoples, as they understood themselves as nations that existed prior to the formation of settler states. Rarely were Wilson’s principles applied to North America or the United States; nor were they ever intended to extend to Indigenous peoples. A second, more radical vision put forward by Communist revolutionary V. I. Lenin argued for the right of colonized nations to secede and declare independence from their colonial masters. This view was echoed by the Third World decolonization movement, as part of a global Socialist and Communist revolution, and it has frequently been applied in the Asian, African, and South American contexts. But this view remained almost entirely absent in North America, except among radical Indigenous, Black, Asian, Caribbean, and Chicanx national liberation movements. The Treaty Council advocated Indigenous nationhood as part of this global anti-colonial movement and in line with Third World liberation movements. After decades of experiencing land loss, enduring bare survival, attempting to work with federal programs, filing court cases, defeating termination legislation, and facing mass relocation, an assertion of Oceti Sakowin sovereignty went from ambition to prescription. Few avenues remained other than the pursuit of international treaty rights. Treaties made with the United States were proof of nationhood. But what legal institution would uphold this position if the United States refused to? If the goal was to reverse the unjust occupation of an entire continent, the advancement of Indigenous rights through the very legal and political systems that justified that occupation in the first place had proven limited in some instances, and hopeless in others. To survive, AIM and the Treaty Council therefore had to look elsewhere to make their case—beyond the confines of the most powerful political construct in world history, the nation-state. Prior to and during colonization, Indigenous nations had self-organized into deliberate confederacies, alliances, and governments. The Nation of the Seven Council Fires (the Oceti Sakowin), for instance, is a confederacy of seven different nations of Lakota-, Dakota-, and Nakota-speaking peoples in the Northern Plains and Western Great Lakes. They are hardly unique; in North America alone there are the Creek Confederacy in the Southeast, the Haudenosaunee Confederacy of Six Nations in the Northeast, the Council of Three Fires (made up of Ojibwes, Odawas, and Potawatomis) in the Great Lakes region, the United Indian Nations in the Ohio River valley (under the Shawnee leadership of Tecumseh), the All Indian Pueblo Council of the Southwest, and the Iron Confederacy of the Northern Plains. Many other political confederacies also flourished prior to, alongside, and in spite of settler states in North America. And their legacies are hardly relegated to the primordial past. Modern Oceti Sakowin internationalism, for instance, traces its origins to the early twentieth century, an era generally viewed as a low point for Indigenous activism and resistance. In North America alone, an estimated precolonial population of tens of millions of Indigenous peoples had been reduced to about 300,000, and for Flathead historian D’Arcy McNickle, writing in 1949, two processes contributed greatly to this decimation: the institution of private property and the destruction of Indigenous governance that once held land in common. Indigenous nations at the time also possessed little in the way of either collective property or political power, as Indigenous territory had been drastically diminished, and the reservation system had overthrown or almost entirely dissolved customary governments. If Indigenous peoples once constituted the tree of the Americas, whose roots deeply entwined in the land, the cultivation of “growth from the severed stump,” McNickle argued, was the pivotal challenge of the twentieth century.7 Physical extermination and the repression of Indigenous political power verified the United States’ genocidal intent, but these had not accomplished their purpose. And despite otherwise stating pluralistic claims to inclusion, McNickle concluded that the United States simply “can not tolerate a nation within a nation.” If Natives were to be assimilated, they would be assimilated as individuals and not as nations. In the popular imaginary, Natives disappeared into the wilderness of history, were never truly nations, and had been overpowered by a superior civilization. If they were nations, they were eclipsed and replaced by the real nation—the United States. Such erasure notwithstanding, vibrant Indigenous political traditions persisted. But to the untrained eye, nothing was awry. From the severed stump began to regrow the tree of life—the tree of resistance that would blossom into revolt decades later.

#### The process and agents of political change matter. Indigenous internationalism must be asserted through Native sovereignty and organizing. The plan and the perm still collude with settlerism, which trades-off with meaningful resistance.

Simpson 16

(Leanne Betasamosake Simpson, renowned Michi Saagiig Nishnaabeg scholar. She holds a PhD from the University of Manitoba, and teaches at the Dechinta Centre for Research & Learning in Denendeh. An Interview with Eve Tuck (Unangax̂), Indigenous Resurgence and Co-resistance, Critical Ethnic Studies, Vol. 2, No. 2 (Fall 2016), pp. 19-34, JKS)

PLACE-BASED INTERNATIONALISM

Eve: One idea that Wayne and I floated in our call for papers is that how a person or community understands the roots or source of injustice will have implications for how they go about undoing that injustice. Does this make sense to you? Might it be too simplistic or problematic?

Leanne: I think we need to be a bit careful here, particularly in the academy. I think Indigenous peoples understand pretty well injustice in their own lives whether or not they can articulate it using the language of colonialism or decolonization. I think movements that link social realities with political systems and focus on creating real-world-on-the-ground alternatives are powerful. I worry that too much of our energy goes into trying to influence the system rather than creating the alternatives. It matters to me how change is achieved. Change achieved through struggle, organizing, and creating the alternatives produces profoundly different outcomes than change achieved through recognition-focused protest, and pressuring the state to make the changes for us. That is a recipe for co-option. I think it is important to understand root causes of injustice, but it is also important to understand think strategically and intelligently about approaches to undoing that injustice. I think that diagnosis and strategic action must be done within grounded normativity. Indigenous thought has a tradition of place-based internationalism that I think is this beautifully fertile spot because it links place-based thinking and struggle with the same decolonial pockets of thinking throughout the world. Nishnaa- beg have been linking ourselves to the rest of the world since the beginning of time, and throughout our resistance to colonialism we have our people traveling throughout the world to link with other communities of resistors. Grassy Narrows First Nation comes to mind in their nearly four- decade fight against mercury poisoning in their river system and the relationship they have made with the Japanese community in Mnimata.6 We need to use our experiences in the past to think critically about how we respond to injustice today. Right now, Indigenous peoples in Canada need to be thinking critically about the implications of seeking recogni- tion within the colonial state because we have a government that is very good at neoliberalism and seducing our hope for their purposes. Again, Glen Sean Coulthard, in Red Skin, White Masks, using the Dene nation’s experience in the 1970s, provides a blistering critique of the pitfalls of seeking political recognition within state structures. He makes the point that continually seeking recognition with the settler-colonial state is a process of co-option and neutralization, and is a way of bringing Indigenous peoples into the systems that guts our resistance movements, for instance, and we get very little in return.7 In fact, in terms of dispossession—that is, the removal, murdering, displacement, and destruction of the relation- ship between Indigenous bodies and Indigenous land—this serves only to facilitate land loss, not improve things. Engagement with the system changes Indigenous peoples more than it changes the system. This can be destructive in terms of resurgence because resurgent movements are trying to do the opposite—we are trying to center Indigenous practices and thoughts in our lives as everyday acts of resistance, and grow those actions and processes into a mass mobilization. I think it is useful to apply this same critique of recognition to orga- nizing and mobilizing with the purpose of making a switch from mobi- lizing around victim-based narratives—that is, publically demonstrating the pain of loss as a mechanism to appeal to the moral and ethical fabric of Canadian society (which has over and over again proven to be morally bankrupt when it comes to Indigenous peoples)—to using that same pain and anger to fuel resurgent actions. This organizing from within grounded normativity has always fueled Indigenous resistance and continues to happen all the time in Indigenous communities—it is just often misread by others. The community of Hollow Water First Nation created the Community Holistic Circle of Healing as a Nishnaabeg restoration of relationships, or a restorative justice model to address sexual violence in their community.8 Christi Belcourt’s Walking with Our Sisters exhibit has created a traveling display of 1,800 moccasin vamps as a way of honoring and commemorating missing and murdered Indigenous women and children in Canada and the United States. The exhibit does not rely on state funding.9 Thousands of volunteers made the vamps. The exhibit works with local communities and their cultural and spiritual practices to install the exhibit and do the necessary ceremony and community processes. Walking with Our Sisters works with local organizers a year in advance of installation, using Indigenous processes to embed the art in community on the terms of the local community. There is also the work of countless urban Indigenous organizations supporting the families of MMIWG2S people. The Native Youth Sexual Health Network provides on-the-ground, community-embedded, peer-to-peer support around sex- ual health and addiction for youth.10 The Akwesasne Freedom School provides Mohawk education for Mohawk children.11 The Iroquois national and Haudenosaunee women’s lacrosse teams travel using Haudenosau- nee passports instead of American or Canadian ones.12 The Unist’ot’en Camp pursues land protection resurgent action and the reclamation of the original name of Mount Douglas, PKOLS, in the city of Victoria, British Columbia.13

## Case

### Mining

#### Asteroid mining solves water conflict and Kessler syndrome

Tillman 19

Nola Taylor Tillman (contributing writer for space.com, loves astronomy and space, and this article cites an asteroid researcher at Johns Hopkins, it is not Nola’s own analysis), 9-29-2019, "Tons of Water in Asteroids Could Fuel Satellites, Space Exploration," Space, https://www.space.com/water-rich-asteroids-space-exploration-fuel.html, // HW AW

When it comes to mining space for water, the best target may not be the moon: Entrepreneurs' richest options are likely to be [asteroids](https://www.space.com/51-asteroids-formation-discovery-and-exploration.html) that are larger and closer to Earth. A recent study suggested that roughly 1,000 water-rich, or hydrated, asteroids near our planet are easier to reach than the lunar surface is. While most of these space rocks are only a few feet in size, more than 25 of them should be large enough to each provide significant water. Altogether, the [water locked in these asteroids](https://www.space.com/how-much-water-in-asteroids.html) should be enough to fill somewhere around 320,000 Olympics-size swimming pools — significantly more than the amount of water locked up at the lunar poles, the new research suggested. Because asteroids are small, they have less gravity than Earth or the moon do, which makes them easier destinations to land on and lift off from. If engineers can figure out how to mine water from these space rocks, they could produce a source of ready fuel in space that would allow spacecraft designers to build [refuelable models](https://www.space.com/orbit-fab-demonstrates-satellite-refueling-technology-on-iss.html) for the next generation of satellites. Asteroid mining could also fuel human exploration, saving the expense of launching fuel from Earth. In both cases, would-be space-rock miners will need to figure out how to free the water trapped in hydrated minerals on these asteroids. "Most of the hydrated material in the near-Earth population is contained in the largest few hydrated objects," Andrew Rivkin, an asteroid researcher at Johns Hopkins University Applied Physics Research Laboratory in Maryland, told Space.com. Rivkin is the lead author on the paper, which estimated that near Earth asteroids could contain more easily accessible water than the lunar poles. Related: [NASA Wants a New Space Telescope to Protect Us All from Dangerous Asteroids](https://www.space.com/nasa-to-build-near-earth-asteroid-hunter-telescope.html) "A sure thing" According to the United Nations Office for Outer Space Affairs, more than 5,200 of the objects launched into space are still in orbit today. While some continue to function, the bulk of them buzz uselessly over our heads every day. **They carry fuel on board, and when they run out, they are either lowered into destructive orbits or left to become** [**space junk**](https://www.space.com/16518-space-junk.html)**, useless debris with the potential to cause enormous problems for working satellites.** [**Refueling satellites in space**](https://www.space.com/8339-wet-asteroid-space-gas-station.html) **could change that model, replacing it with long-lived, productive orbiters.** "It's easier to bring fuel from asteroids to geosynchronous orbit than from the surface of the Earth," Rivkin said. "If such a supply line could be established, it could make [asteroid mining](https://www.space.com/39363-planetary-resources-asteroid-mining-satellite-launches.html) very profitable." Hunting for space water from the surface of the Earth is challenging because the planet's atmosphere blocks the wavelength of light where water can be observed. The asteroid warming as it draws closer to the sun can also complicate measurements. Instead, Rivkin and his colleagues turned to a class of space rocks called Ch asteroids. Although these asteroids don't directly exhibit a watery fingerprint, they carry the telltale signal of oxidized iron seen only on [asteroids](https://www.space.com/51-asteroids-formation-discovery-and-exploration.html) with signatures of water-rich minerals, which means the authors felt confident assuming that all Ch asteroids carry this rocky water. Based on meteorite falls, a previous study estimated that Ch asteroids could make up nearly 10% of the [near-Earth objects](https://www.space.com/nasa-to-build-near-earth-asteroid-hunter-telescope.html) (NEOs). With this information, the researchers determined that there are between 26 and 80 such objects that are hydrated and larger than 0.62 miles (1 km) across. Right now, only three NEOs have been classified as Ch asteroids, although others have been spotted in the asteroid belt. Most NEOs are discovered and observed at wavelengths too short to reveal the iron band that marks the class. Carbon-rich asteroids, which include Ch asteroids and other flavors, are also darker than the more common stony asteroids, making them more challenging to observe. Although Ch asteroids definitely contain water-rich minerals, that doesn’t necessarily mean that they will always be the best bet for space mining. It comes down to risk. Would an [asteroid-mining](https://www.space.com/moon-asteroid-space-mining-with-concentrated-sunlight.html) company rather visit a smaller asteroid that definitely has a moderate amount of water, or a larger one that could yield a larger payday but could also come up dry? "Whether getting sure things with no false positives, like the Ch asteroids, is more important or if a greater range of possibilities is acceptable with the understanding that some asteroids will be duds is something the miners will have to decide," Rivkin said. Not too big, not too small In addition to estimating the number of large, water-rich asteroids might be available, the study also found that as many as 1,050 smaller objects, roughly 300 feet (100 meters) across, may also linger near Earth. Their small bulk will make them [easier to mine](https://www.space.com/30213-asteroid-mining-planetary-resources-2025.html) because their low gravity will require less fuel to escape from, but they will produce less water overall, and Rivkin expects that the handful of larger space rocks will be the first targets. "It seems likely that the plan for these companies will be to find the largest accessible asteroid with mineable material with the expectation that it will be more cost-effective than chasing down a large number of smaller objects," Rivkin said. "How 'accessible' and 'mineable material' and 'cost-effective' are defined by each company is to be seen." But asteroids will certainly be more accessible than the moon, another [potential source](https://www.space.com/41164-mining-moon-water-plans-take-shape.html) of space-based water-rich minerals. According to Rivkin, landing safely on the lunar surface takes more than a hundred times the change of velocity required to land on an asteroid. Similarly, taking off from the moon means breaking free from its gravity, requiring even more fuel. "Even asteroids that are a bit farther from the Earth than the moon can be reached with less fuel than the lunar surface," Rivkin said.

#### Global water war is inevitable in the squo – extraction, climate change, drought – best analysis

Milne 21

Sandy Milne (austrailian journalist, has written a whole lot of articles about austrialian military), 16 aug 21, "How water shortages are brewing wars," BBC, https://www.bbc.com/future/article/20210816-how-water-shortages-are-brewing-wars, // HW AW

**Unprecedented levels of dam building and water extraction by nations on great rivers are leaving countries further downstream increasingly thirsty, increasing the risk of conflicts**. Speaking to me via Zoom from his flat in Amsterdam, Ali al-Sadr pauses to take a sip from a clear glass of water. The irony dawning on him, he lets out a laugh. "Before I left Iraq, I struggled every day to find clean drinking water." Three years earlier, al-Sadr had joined protests in the streets of his native Basra, demanding the authorities address the city's growing water crisis. "Before the war, Basra was a beautiful place," adds the 29-year-old. "They used to call us the Venice of the East." Bordered on one side by the Shatt al-Arab River, the city is skewered by a network of freshwater canals. al-Sadr, a dockhand, once loved working alongside them. "But by the time I left, they were pumping raw sewage into the waterways. We couldn't wash, the smell [of the river] gave me migraines and, when I finally fell sick, I spent four days in bed." In the summer of 2018, tainted water sent [120,000 Basrans to the city's hospitals](https://news.yahoo.com/more-basra-water-crises-unless-iraq-govt-fixes-090656526.html) – and, when police opened fire on those who protested, al Sadr was lucky to escape with his life. "Within a month I packed my bags and left for Europe," he says. Around the world, stories like al Sadr's are becoming far too common. As much as a quarter of the world's population now [faces severe water scarcity](https://news.trust.org/item/20200902202142-ku0o2) at least one month out of the year and – as in al-Sadr's case – it is leading many to seek a more secure life in other countries. "If there is no water, people will start to move," says Kitty van der Heijden, chief of international cooperation at the Netherlands' foreign ministry and an expert in hydropolitics. **Water scarcity affects roughly 40% of the world's population and, according to predictions by the United Nations and the World Bank, drought could put up to** [**700 million people at risk of displacement**](https://www.unccd.int/actions/drought-initiative) **by 2030**. People like van der Heijden are concerned about what that could lead to. "If there is no water, politicians are going to try and get their hands on it and they might start to fight over it," she says. Over the course of the 20th Century, global water use grew at more than twice the rate of population increase. Today, **this dissonance is leading many cities – from** [**Rome**](https://www.bbc.com/news/world-europe-41081066) **to** [**Cape Town**](https://www.wri.org/insights/3-things-cities-can-learn-cape-towns-impending-day-zero-water-shut)**,** [**Chennai**](https://www.npr.org/sections/goatsandsoda/2019/06/25/734534821/no-drips-no-drops-a-city-of-10-million-is-running-out-of-water?t=1626365858497) **to** [**Lima**](http://news.bbc.co.uk/1/hi/world/americas/3697647.stm) **– to ration water. Water crises have been ranked in the top five of the World Economic Forum's** [**Global Risks by Impact**](http://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf) **list nearly every year since 2012**. In 2017, severe droughts contributed to the [worst humanitarian crisis since World War Two](https://www.un.org/press/en/2017/sc12748.doc.htm), when 20 million people across Africa and the Middle East were forced to leave their homes due to the accompanying food shortages and conflicts that erupted. Peter Gleick, head of the Oakland-based Pacific Institute, has spent the last three decades studying the link between water scarcity, conflict and migration and believes that water conflict is on the rise. "With very rare exceptions, no one dies of literal thirst," he says. "But more and more people are dying from contaminated water or conflicts over access to water." Falling water quality around Basra, southern Iraq, has been exacerbated by reduced river flows due to damming in Turkey (Credit: Haidar Mohammed Ali/AFP/Getty Images) Gleick and his team are behind the [Water Conflict Chronology](http://www.worldwater.org/conflict/map/): a log of 925 water conflicts, large and small, stretching back to the days of the Babylonian king Hammurabi. It is not, by any means, exhaustive and the conflicts listed vary from full blown wars to disputes between neighbours. But what they reveal is that the relationship between water and conflict is a complex one. "We categorised water conflicts in three groups," says Gleick. "As a 'trigger' of conflict, where violence is associated with disputes over access and control of water; as a 'weapon' of conflict, where water or water systems are used as weapons in conflicts, including for the use of dams to withhold water or flood downstream communities; and as 'casualties' or 'targets' of conflicts, where water resources or treatment plants or pipelines are targeted during conflicts." Leaf through the records he and his colleagues have compiled, however, and it becomes clear that the bulk of the conflicts are agriculture-related. It's perhaps not surprising as agriculture [accounts for 70%](https://www.worldbank.org/en/topic/water-in-agriculture#:~:text=Currently%2C%20agriculture%20accounts%20(on%20average,to%20the%20evapotranspiration%20of%20crops).) of freshwater use. In the semi-arid Sahel region of Africa, for example, there are regular reports of herdsmen and crop farmers clashing violently over scarce supplies of water needed for their animals and crops. But as demand for water grows, so too does the scale of the potential conflicts. You might also like: [The city running out of water](https://www.bbc.com/future/article/20181011-how-to-solve-delhis-water-crisis) [How long can you survive without water?](https://www.bbc.com/future/article/20201016-why-we-cant-survive-without-water) [The megacity digging a million wells](https://www.bbc.com/future/article/20201006-india-why-bangalore-is-digging-a-million-wells) "The latest research on the subject does indeed [show water-related violence increasing over time](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3076402/)," says Charles Iceland, global director for water at the World Resources Institute. "Population growth and economic development are driving increasing water demand worldwide. Meanwhile, climate change is decreasing water supply and/or making rainfall increasingly erratic in many places." Nowhere is the dual effect of water stress and climate change more evident than the wider Tigris-Euphrates Basin – comprising Turkey, Syria, Iraq and western Iran. According to satellite imagery, the region is [losing groundwater faster than almost anywhere else in the world](https://www.stimson.org/2021/joint-working-group-on-international-and-eu-water-diplomacy-in-focus-the-euphrates-tigris-river-basin/). And as some countries make desperate attempts to secure their water supplies, their actions are affecting their neighbours. India's Northern Plains are one of the most fertile farming areas in the world, yet today, villagers regularly clash over water scarcity During June 2019, as Iraqi cities sweltered through a [50C (122F) heatwave](https://www.independent.co.uk/climate-change/news/climate-change-apartheid-poor-iraq-effects-heatwave-a9049206.html), Turkey said it would [begin filling its Ilisu dam](https://www.reuters.com/article/us-turkey-dam-idUSKCN1US194) at the origins of the Tigris. It is the latest in a long-running project by Turkey to build 22 dams and power plants along the Tigris and the Euphrates that, according to a report by the French International Office for Water, is significantly [affecting the flow of water into Syria, Iraq and Iran](https://www.oieau.org/eaudoc/system/files/documents/40/204634/204634_doc.pdf). It claims that when complete Turkey's Guneydogu Anadolu Projesi (GAP) could include as many as [90 dams and 60 power plants](https://www.oieau.org/eaudoc/system/files/documents/40/204634/204634_doc.pdf). (See [how dams such as the Ilisu are reshaping our planet](https://www.bbc.com/future/article/20201021-how-dams-have-reshaped-our-planet).) As water levels behind the mile-wide Ilisu dam rose, [the flow from the river into Iraq halved](https://www.independent.co.uk/news/world/middle-east/iraq-water-rivers-shortage-drought-baghdad-war-isis-a8426766.html). Thousands of kilometres away in Basra, al-Sadr and his neighbours saw the [quality of their water deteriorate](https://www.hrw.org/report/2019/07/22/basra-thirsty/iraqs-failure-manage-water-crisis). In August, hundreds of people began pouring into Basra's hospitals suffering from rashes, abdominal pain, vomiting, diarrhoea, and even cholera, [according to Human Rights Watch](https://www.hrw.org/report/2019/07/22/basra-thirsty/iraqs-failure-manage-water-crisis). "There's actually two parts to the story in Basra," Iceland says. "Firstly, you have the obvious discharge of wastewater into local waterways without any treatment. But you've also got to consider the damming at the Turkish border – with less freshwater flowing down the Tigris and Euphrates, saltwater is intruding further up the river (from the Persian Gulf). Over time, it's ruining crops and it's making people sick." It's a complicated picture, but this ability to see links between the seemingly disparate has informed Iceland's work with the Dutch government-funded Water, Peace and Security (WPS) partnership, a group of six American and European NGOs (including the Pacific Institute and the World Resources Institute). They've developed a [Global Early Warning Tool](https://waterpeacesecurity.org/map), which uses machine learning to predict conflicts before they happen. It combines data about rainfall, crop failures, population density, wealth, agricultural production, levels of corruption, droughts, and flooding, among many other sources of data to produce conflict warnings. They are displayed on a red-and-orange Mercator projection down to the level of administrative districts. Currently it is warning of around 2,000 potential conflict hotspots, with an accuracy rate of 86%. (Read more about [how AI can help to identify conflicts before they happen](https://www.bbc.com/future/article/20190219-how-artificial-intelligence-could-unlock-world-peace).) The Indus River is a vital water source for northern India and Pakistan, but originates in the mountains of Tibet that are controlled by China (Credit: Nadeem Khawar/Getty Images) But while the WPS Tool can be used to identify locations where conflicts over water are at risk of breaking out, it can also help to inform those hoping to understand what is happening in areas that are already experiencing strife due to water scarcity. India's Northern Plains, for example, are one of the most fertile farming areas in the world, yet today, [villagers regularly clash over water scarcity](https://www.thekashmirmonitor.net/2-haryana-villages-clash-over-water-8-bikes-set-on-fire-12-injured/). The underlying data reveals that population growth and high levels of irrigation have outstripped available groundwater supplies. Despite the area's lush-looking cropland, the WPS map ranks nearly every district in Northern India as "extremely high" in terms of baseline water stress. Several key rivers which feed the area – the Indus, Ganges and Sutlej – all originate on the Tibetan side of the border yet are vital for water supplies in both India and Pakistan. compounds the problem. Several border skirmishes have broken out recently between India and China, which lays claim to upstream areas. A violent clash in May last year in the Galwan Valley, through which a tributary to the Indus flows, left 20 Indian soldiers dead. Less than a month later there were reports that China was building "structures" that might dam the river and so restrict its flow into India. But the data captured by the Global Early Warning tool also reveals some strange trends. In some of the most water-stressed parts of the world, there appears to be a net-migration of people into these areas. Oman, for example, suffers higher levels of drought than Iraq but received hundreds of thousands of migrants per year prior to the pandemic. That's because Oman fares far better than the latter in terms of corruption, water infrastructure, ethnic fractionalisation, and hydropolitical tension. "A community's vulnerability to drought is more important than the drought itself," says Lina Eklund, of a physical geography researcher at Sweden's Lund University

#### Asteroids are in the asteroid belt. How and why do they get to earth?

#### 1AC Scoles isn’t about private companies or mining. The only scenario they give is a NASA asteroid redirect mission. This proves a massive alt cause and means they have no link to the space dust impact.

NASA chose the second option for its Asteroid Redirect Mission, which aims to pluck a boulder from an asteroid’s surface and relocate it to a stable orbit around the moon. But an asteroid’s gravity is so weak that it’s not hard for surface particles to escape into space.

#### Even a worst-case Kessler syndrome would have little effect—the math checks out.

Fange 17

Daniel Von Fange, senior engineer @ Origin Protocol, 5-21-2017, "Kessler Syndrome is Over Hyped," Braino.org, <http://braino.org/essays/kessler_syndrome_is_over_hyped/> //MLT

Let’s imagine a worst case scenario. An evil alien intelligence chops up everything in High LEO, turning it into 1cm cubes of death orbiting at 1000km, spread as evenly across the surface of this sphere as orbital mechanics would allow. Is humanity cut off from space? I’m guessing the world has launched about 10,000 tons of satellites total. For guessing purposes, I’ll assume 2,500 tons of satellites and junk currently in High LEO. If satellites are made of aluminum, with a density of 2.70 g/cm3, then that’s 839,985,870 1cm cubes. A sphere for an orbit of 1,000km has a surface area of 682,752,000 square KM. So there would be one cube of junk per .81 square KM. If a rocket traveled through that, its odds of hitting that cube are tiny - less than 1 in 10,000. So even in the worst case, we don’t lose access to space. Now though you can travel through the debris, you couldn’t keep a satellite alive for long in this orbit of death. Kessler Syndrome at its worst just prevents us from putting satellites in certain orbits. In real life, there’s a lot of factors that make Kessler syndrome even less of a problem than our worst case though experiment. Debris would be spread over a volume of space, not a single orbital surface, making collisions orders of magnitudes less likely. Most impact debris will have a slower orbital velocity than either of its original pieces - this makes it deorbit much sooner. Any collision will create large and small objects. Small objects are much more affected by atmospheric drag and deorbit faster, even in a few months from high LEO. Larger objects can be tracked by earth based radar and avoided. The planned big new constellations are not in High LEO, but in Low LEO for faster communications with the earth. They aren’t an issue for Kessler. Most importantly, all new satellite launches since the 1990’s are required to include a plan to get rid of the satellite at the end of its useful life (usually by deorbiting) So the realistic worst case is that insurance premiums on satellites go up a bit. Given the current trend toward much smaller, cheaper micro satellites, this wouldn’t even have a huge effect. I’m removing Kessler Syndrome from my list of things to worry about.

#### Environmental monitoring, as per 1AC Biggs, is a joke and only is the oil industry’s current ploy to say “we don’t have enough tech to know we are killing the environment” – it’s just false.

#### 1AC Xu isn’t about space war—all it says is that some countries might put nukes in space. No warrants why it causes war—it hasn’t on earth, so why do they uniquely cause war in space?

#### No space war--Hotlines and dialogue prevent escalation AND increase cooperation, which solves the impact.

Trenin ‘19 [Dr. Dmitri Vitalyevich Trenin, PhD is the director of the Carnegie Moscow Center, a think tank and regional affiliate of the Carnegie Endowment for International Peace. Strategic Stability in the Changing World. March 2019. https://carnegieendowment.org/files/3-15\_Trenin\_StrategicStability.pdf]

To maintain the minimum degree of strategic stability, it’s essential to prevent a direct military collision between the United States and Russia or the United States and China. With that goal in mind, there are already around-the-clock communication lines between the top military leaderships: ministers of defense, chiefs of general staff, and key U.S./NATO and Russian military personnel. Direct communication lines make it possible to prevent or neutralize incidents in the air, at sea, or on land that involve Russian and U.S./ NATO armed forces, thus avoiding any uncontrollable escalation. Communication channels between the leadership of the U.S. armed forces and the top brass of the Chinese People’s Liberation Army serve a similar purpose. A communication channel between the respective heads of U.S. and Russian intelligence, and between the U.S. and Chinese services, could play an important role as well. Direct contacts at the top political level are also critically important as a means of de-escalation in the most dangerous situations.

In addition to constantly functioning lines of communication, U.S., Russian, and Chinese heads of national security, foreign affairs, and defense should engage in regular dialogue on strategic stability issues. Such dialogue allows parties to better understand each other’s strategic logic, the contents of military doctrines, and the rationale behind approaches to global and regional security programs. However, broader U.S.-Russian dialogue on strategic issues will likely remain blocked for a long time due to political reasons.

Functioning arms control treaties are not a sine qua non requirement for strategic stability. It is highly unlikely that the United States and China will conclude arms control agreements in the foreseeable future. Preserving U.S.-Russian arms control is already difficult enough, with no prospect for improvement visible on the horizon. But in this atmosphere of growing mistrust and mutual suspicion, discussions about strategic stability that aren’t aimed at negotiating specific agreements will likely be ineffective. The most that can be done diplomatically in the short term— or even the medium term—is to agree on conflict prevention, confidence-building, and transparency measures.

### Multilat

#### 1AC Wall concedes public sector alt cause in the small text:

For decades, spacefaring nations have been licensing launches internally, without much international coordination, cooperation or long-term planning. In recent years, low-Earth orbit has become crowded enough with satellites and hunks of debris that collisions are a real concern. For example, the International Space Station has had to maneuver itself away from potential impacts three times so far in 2020 alone.

#### Space multilat impossible--China and Russia are making their own exclusive space tea-party and keeping the US out — the ILRS is already set in stone

Druker 1-22-22

[Simon Druker](https://www.linkedin.com/in/simon-druker/?originalSubdomain=ca) (broadcast journalist at CKWX News in Vancouver); “China, Russia to start building lunar research station by 2026”; *United Press International*; January 28, 2022; <https://www.upi.com/Science_News/2022/01/28/world-china-russia-build-joint-lunar-research-base/6501643387198/>; // HW-EMJ

Jan. 28 (UPI) -- China said Friday that it expects to sign a space agreement with Russia by the end of this year that will include construction of a joint lunar research facility. "We are intensively engaged in negotiations and have basically reached a consensus. The agreement is quite possible to be signed as soon as possible this year," China National Space Administration Vice Administrator Wu Yanhua told a Friday news conference, the Eurasian Times said. The countries aim to begin construction of the International Lunar Research Station by 2026 and have basic infrastructure finished by 2035. It will be capable of conducting multidisciplinary research activities. The construction area will be chosen before 2025. This comes on the same day the China National Space Administration released a white paper outlining the immediate future of the country's space program, as well as its recent accomplishments. "The space industry is a critical element of the overall national strategy, and China upholds the principle of exploration and utilization of outer space for peaceful purposes," the paper states. A future base also could include a reserve spacecraft capable of taking off from the moon's surface, Russia's Sputnik News Agency reported Tuesday. It also reported member states of the European Space Agency have been invited to participate in the facility's development. The agency said it has not yet reached a decision. In September, China and Russia jointly hosted a closed-door workshop on the lunar station. Experts from France, Italy, the Netherlands, Germany, Malaysia, Thailand also were invited.

#### 1AC Beard says every country has to be involved for it to be fair, but the plan only involves space-faring nations – treat this as a terminal solvency takeout because their internal link disagrees with the plan text.

#### 1AC Pelton and 1AC Gallagher say an international space framework would be good, but all the plan does is making mining a little harder for companies – they don’t make the progress that either card sets the threshold for solvency at.

#### Blake 17 says that establishing such a framework is super hard and won’t happen naturally – another instance of terminal defense on their multilat advantage since there’s no chance for spillover.