

# 1AR CARDS

I affirm.

**My role of the ballot is resisting colonial mindsets and policies as that should be the first ethical priority in debates about outer space.,**

**Prefer:**

**1] Under util frameworks, colonialism is reinforced, and minorities are always excluded due to the prioritization of the “majority”**

**2] Can’t solve because governments deal with averages and aggregates, and can’t solve the violence of indigenous people under a util fw**

**3] Counter-ROB shuts down indigenous voices and in debate by adopting the colonizer’s perspective which shuts down meaningful, educational debate**

**Stopping the violence against Indigenous people must be the first ethical priority, especially in space. Tavares**

Frank. “Ethical Exploration And The Role Of Planetary Protection In Disrupting Colonial Practices.” Planetary Science and Astrobiology Decadal Survey 2023-2032. October 25, 2020. Web. December 11, 2021.  
<<https://arxiv.org/ftp/arxiv/papers/2010/2010.08344.pdf>>.

All of humanity is a stakeholder in how we, the planetary science and astrobiology community, engage with other worlds. **Violent colonial practices and structures--genocide, land appropriation, resource extraction, environmental devastation, and more--have governed exploration of** Earth, and if not actively

dismantled, will define the methodologies and mindset we carry forward into **space exploration**. With sample return missions from Mars underway, resource maps of the Moon being produced, and private industry progressing toward human exploration of Mars, the timeline is urgent to develop a modern, inclusive, robust, and enforceable policy framework to govern humanity’s engagement with other worlds. This paper does not recommend specific policies or implementation strategies, and instead focuses on “the identification of planetary protection considerations,” in accordance with the scope of this decadal survey. 1 Ethical considerations must be prioritized in the formation of planetary protection policy. The choices we make in the next decade of space exploration will dictate the future of humanity’s presence on other worlds, with the potential to impact the environments we interact with on timescales longer than the human species has existed. We should make these choices consciously and carefully, as many will be irreversible, especially those pertaining to how we interact

with potential extraterrestrial life. It is critical that **ethics and anticolonial practices are a central consideration of planetary protection. We must actively work to prevent capitalist extraction on other worlds, respect and preserve their environmental systems, and acknowledge the** sovereignty

and **interconnectivity of all life**. The urgency of finding a second home on Mars in the shadow of looming environmental catastrophe on Earth is not only a questionable endeavor 2 but scientifically impossible with present technology, 3 and is often used as a justification for human exploration and to suggest that these ethical questions may be antiquated in the face of that reality. Here we argue the opposite: that the future of our own species and our ability to explore space depends on pursuing anticolonial practices on Earth and beyond. An anticolonial perspective can push us towards an ethic that acknowledges our interconnected and entangled lives. Rather than an escape, or a continuation of manifest destiny, the Moon and Mars may provide the key to practicing other ways of exploring and of being. Our primary recommendation is that the planetary science decadal survey call on all bodies involved in developing planetary protection policies to engage in a process of community input to establish a robust reevaluation of the ethics of future crewed and uncrewed missions to the Moon, Mars, and other planetary bodies with the intention of developing anticolonial practices, centered around the considerations we present. Current policy does not adequately address questions related to in-situ resource utilization, environmental preservation, and interactions with potential extraterrestrial life. Documents such as the Outer Space Treaty in theory address

some of these concerns, but lack effectiveness without enforcement mechanisms. **A reformed planetary policy that addresses today's challenges and is inclusive, robust, and enforceable must be established. Special emphasis should be placed on resisting colonial structures in these policies.**

## Native Americans, themselves, state that Outer Space Exploration causes them to lose a sense of identity, belonging, and culture

### The fundamental differences between western and Native accounts of space highlights the actualization of my framing. Jane Young "Pity the Indians of Outer Space":

Native American Views of the Space Program Author(s): Source: Western Folklore , Oct., 1987, Vol. 46, No. 4 (Oct., 1987), pp. 269-279 Published by: Western States Folklore Society. <https://www.jstor.org/stable/1499889>

Because **Native Americans have a different perspective of the world**, they can offer us alternative ways of seeing ourselves in relationship to the natural world and help us answer the question of what constitutes appropriate behavior in outer space, as well as on earth. Furthermore, some non-Native Americans realize that, as they look to the traditions of the Native Americans, they see their own heritage with increased clarity. Although this appreciation of Native Americans comes too late in America's history and could be construed as appropriating their ideas as we did their land, a significant number of Native Americans are receptive to the potential that now exists for a dialogue between traditions, both non-Native and Native American, perhaps because they are experiencing a parallel concern, a need to come to terms with their own emerging identity. Both groups have begun to realize that it is only through such a dialogue that the mistakes of the past can be avoided in the future. For non-Native Americans the justification for this inquiry is that through an analysis of the difference

between the two understandings of space-Anglo and Native American-we can better "see" the ideological dimensions of our own, taken-for-granted **Native American attitudes towards "outer space"** often conflict with the attitudes of the proponents of the U.S. space program. Rather than applying the metaphor of the "new frontier" or even the term "outer" to this aspect of the cosmos, many **Native Americans regard [space] as**

**encompassed in "Father Sky,"** part of their network of symbolic associations that integrates all elements of the cosmos. A recent commercial called "Earth Pictures," produced by TRW, a firm that specializes in "aerial views" of portions of the earth's globe from outer space aptly illustrates these differing attitudes. In this commercial, TRW representatives give members of the Navajo tribe a guided tour of the TRW laboratories and conclude by showing them a satellite picture (Landsat) of the Navajo reservation from outer space. With evident humor, the Navajos respond by holding up a picture of outer space from their reservation-a dry painting of Father Sky who contains within his body the sun, moon, and constellations. The commercial thus serves to illustrate Navajo beliefs about "outer space."

According to Navajo worldview, which emphasizes harmonious relations with all elements of the cosmos-a sacred kinship among all aspects of experience, natural and supernatural-Father Sky is a living being, intimately related to humans who should, therefore, treat him with

appreciation and respect. This example from the Navajo is representative of the cosmology of most Native American groups, a cosmology that is shaped by a belief in the unity and sacred nature of all life, the above and the below. As Joseph Epes Brown suggests, the Native American quality of seeing is based on "a polysynthetic metaphysicality of nature, immediately experienced rather than dangerously abstracted."<sup>4</sup> He describes this vision as a "message of the sacred nature of the land, of place."<sup>5</sup> Place in this sense extends, of course, to outer space, or Father Sky, as well as to Mother Earth. **This perspective contrasts** sharply with that of

**enthusiasts of space exploration who regard space as something "out there," beyond everyday experience, through which we should** travel to reach planets and other objects that we will investigate, and, if possible, **use to meet our own needs.** I have taken the title of this essay from the transcript of a convocation of Native American scholars that

took place in 1970. The statement, "pity the Indians and the buffalo of outer space," refers to the Euro-American concept of the American frontier, based on the erroneous notion that the "New World" was unoccupied, hence available for exploration and exploitation.<sup>6</sup> Consequently, many indigenous Americans view the use of the metaphor of the frontier in the argument for the expanded exploration and settlement of outer space as parallel to the historic "settlement" of America in which homesteaders extended the notion of "unoccupied" land through time as they pushed the "frontier" steadily westward. The Native Americans had no encouraging vision of the frontier for, as a conquered people, they found their traditional domain constricted by the expansion of European cultures into the New World. They have no hopeful vision of the so-called "new frontier" of outer space, either: "pity the Indians of outer space" whose territory is regarded as unoccupied land to which powerful governments can lay claim. Native Americans fear that the motives of expansion and exploitation that, in part, drive the space program will bring disorder into the cosmos. In contrast, according to the Native American view, one should strive to bring oneself into harmony with the order perceived in the heavens, rather than to challenge that order. Thus, many elements of Native American folklore and worldview outline principles of behavior that stand in opposition to those of the proponents of the U.S. space program. Behavior is a key word here, for the opposition is directed not so much to the simple goals of the space program as to the attitudes those who are actively involved in the space program have about the beings who reside in this part of the cosmos, and the disastrous actions that will ensue from these mis-guided notions. The following anecdotes from recent Native American oral tradition exemplify this different perspective. An anthropologist working with Inuit peoples told them of the first moon shot, and of astronauts walking on the moon. The Inuits began laughing, and when the anthropologist inquired why, they replied: "We didn't know this was the first time you white people had been to the moon. Our shamans have been going for years. They go all the time." The woman who told this story added, "We do go to visit the moon and moon people all the time. The issue is

not whether we go to visit our relatives, but how we treat them [the moon] and their homeland when we go." An example from the Navajo illustrates their concern that the "moon people" will receive the same treatment from "Western" society as the American Indians did. During the first years of outer space exploration, NASA leased some Navajo land for test sites. One site in particular was to be used to test the mechanized moon walker. At one point during the testing, NASA invited the Navajo tribal chairman, Peter MacDonald, out to the site as an observer. MacDonald brought Navajo singer, or medicine man, with him. When told that these men he saw in strange suits would be going to the moon, the singer asked if he could send a message to the moon people. So a tape recorder was brought to him and he recorded a message in the Navajo language. When he finished speaking, the NASA people asked MacDonald to translate the message. "Okay," MacDonald said. "He's telling the moon people to watch you guys carefully, because you might screw things up on the moon the way you have on Earth." Some of the Navajo regard explorations in outer space, specifically moon landings, as responsible for disasters here on earth. When a particularly dry spell of weather hit the eastern area of the Navajo reservation and many sheep and goats died, tribal members there attributed the drought to witchcraft. This was the same drought period that Navajos in the Chuska Valley interpreted as having been caused by the United States moon landings.<sup>8</sup> In this particular case, the Navajo view space exploration and witchcraft as similarly destructive of the harmonious existence that they strive for through the vehicle of ceremonial activity. Exploring the relationship between what has been called "main- stream experiences" and Native American stories, Simon Ortiz, an Acoma poet and short story writer, describes the reactions of a traditional Acoma man to modern technology in the story "Men on the Moon."<sup>9</sup> As various relatives point out the benefits of modern technology, the old man's perplexed responses indicate that his traditional view of the world is incompatible with these so-called benefits and the system of values that they imply. His daughter brings him a television set which, in itself, is somewhat incomprehensible to him, and the family watches the Apollo moon landing. When his son-in-law tells him that scientists want to find out what is on the moon because they are looking for knowledge, the old man wonders if men "have run out of places to look for knowledge on the earth." When he is told that the scientists believe this knowledge from the moon will help them learn more about the universe, find out "where everything began and how everything was made," the old man suggests, first, that his son-in-law is teasing him. When assured that this is not the case,

he asks, "Do they say why they need to know where everything began? Hasn't anyone ever told them?" The old man's questions here reveal his understanding that **the sacred calls for a different sort of knowledge than that demanded by science and its products.** His comments throughout the story suggest, in fact, that research done in the name of **science alone cannot provide a holistic understanding of experience.** Similarly, some non-Native Americans have begun to question whether scientists can carry out purely objective research; whether they are capable of, or even ought to attempt, the demystification of the moon.<sup>1</sup> The story continues and that night the old man dreams that Flintwing Boy and Coyote are watching a monster with metal legs that crushes trees, grass and flowers; as they watch they realize that, alone, they are powerless to stop the monster. So they face East, pray, breathe on some sacred pollen, take in the breath of all the directions and give cornfood to the earth. Flintwing Boy then prepares his arrows and sends Coyote to the village to warn the people and to tell them "to talk among themselves and

decide what it is about and what they will do." Ortiz illustrates here the relevance and immediacy of traditional narrative for this old man; it becomes for him a way of taking the dream-vision to heart in order to begin to take the appropriate action; it is a means by which he comes to terms with such potential dangers as a metal monster that lands on the moon and crushes the life out of things in nature. **In contrast to the view of outer space as consisting of inanimate objects in motion, many Native American groups see themselves as intimately related,** in a literal as well as a ceremonial manner, **to the sun, moon, and stars.** The

Skidi Pawnee, for instance, believe that the people on earth were conceived by the stars; thus, for them, the sky is populated with beings who have a kinship relationship to those on earth.<sup>2</sup> The sun, moon, and stars are the fathers, mothers, aunts, and uncles of the people on earth and ought to be treated with respect. Similarly, Zuni cosmology is shaped by a belief in the essential connectedness of all life, the sky and the earth, and all else that exists. The Zunis speak of the Sun Father, Earth Mother and all others who reside in these realms as living beings; furthermore, the zenith (above) and nadir (below) are integral to their conceptual model of directionality, extending the two-dimensional scheme (based on the four semi-cardinal directions) into three-dimensional space. The Zunis, like the Pawnee, see themselves as intimately related to the sun, moon, and stars. It is not surprising, then, that they perceive the actions of non-Native Americans towards these cosmological beings as not only disrespectful, but highly dangerous. The Zuni attitude toward the "persons" who inhabit the sky world, as well as their perceptions of space and time more generally, are aptly illustrated by stories several Zunis told me about certain clown performances that occurred at the time of the first U.S. moon shots. One man described a memorable summer rain dance during which the clowns mimicked the behavior of the first astronauts to walk on the moon.<sup>3</sup> According to this account, the clowns in the plaza gave a good rendition of the particular walk that the astronauts in their cumbersome space suits exhibited. Then the clowns climbed to the rooftops and walked on top of one of the sacred kivas. The purpose of these actions, my Zuni consultant said, was to object to the behavior of the astronauts who heedlessly walked on the body of the Moon Mother and pierced her with metal instruments in order to bring back samples for study.<sup>4</sup> This performance was not only a critique of the moon shots, however, but an enactment of Zuni cosmological principles- that the clowns equated the moon with sacred space in this instance was not arbitrary. This coupling suggests a merging of space and time in a ritual context such that the kiva, a ceremonial chamber, sometimes located underground and symbolically associated with the emergence from the underworld, becomes equivalent to the moon, one of the Zuni deities who travels across the sky.<sup>5</sup> Outer and inner space thus occupy the same place at the same time. Zuni "clowns" who portrayed the astronauts not only provide comic relief, easing tension through laughter, but also embody disorder through ritual reversals. In addition, their performances often become vehicles for criticizing the actions of both Zunis and non-Zunis alike. The Zunis regard these clowns as extremely powerful, potentially dangerous beings who play a central role in their ceremonies. Between "sets" of the sacred rain dances, they mimic the stately kachinas, make sexual overtures to the highly respected matrons of the tribe, and even walk on the moon; yet none of these activities constitutes appropriate behavior in day-to-day life. The disorderly behavior of the clowns, enacted in a ceremonial context, contrasts with and, therefore, emphasizes the order by which people should govern their lives. Significantly, Zuni and Hopi clowns include impersonations of anthropologists and government bureaucrats, as well as astronauts, in their repertoire-perhaps an indication that these roles are characterized by the exploitative nature of the Anglo-American.<sup>15</sup> Similarly, the Cherokee carry out a special ritual dance, called the Booger Dance, that portrays "the European invader as awkward, ridiculous, lewd, and menacing, a dramatic perpetuation of the tradition of hostility and disdain."<sup>16</sup> This dance functions to lessen the harmful powers of the aliens who, in the form of living beings or ghosts, are responsible for sickness and misfortune. The Booger Dance is frequently recommended by a medicine man to form part of a cure for a sick person. Interestingly, one Zuni man who described the clowns' performance of the first moon walk mentioned it within the context of a discussion about the ability of the clowns to predict, and hence, control, future events. His description of the event tallied with the others I had heard, with one striking difference: he said the event took place a year before astronauts first walked on the moon. Certainly, this example underscores the perceived power of the clowns, but it also serves to link this event with other ominous events foreseen in the future. This man associated the story of the moon walk with one the grandfathers used to tell long ago, predicting that a time would come when their children would begin to drink dark liquid and quarrel and eventually the world would end in a shower of hot rain.<sup>17</sup> Finally, just as the clowns' equating of the moon and the kiva constituted a collapsing of inner and outer space in ritual activity, so does this particular instance of ability to predict the future reveal a similar collapsing of time: present and future coalesce as the clowns ritually enact an event that has not yet occurred. These examples illustrate a traditional Native American ethos in which time as well as space can be described as "inner-" rather than "outer-" directed. According to Western Puebloan mythology, which the Pueblos themselves regard as history, the people back in the time of the beginning lived in the fourth underworld, below the surface of the earth.<sup>18</sup> This "time of the beginning" had no beginning; it simply was, before the time of the emergence.

Similarly, Puebloans believe that existence after death is not situated in the sky, but rather, inside mother earth, back in the time of the beginning. **In the Zuni origin myth, as the people search for the Center after they have emerged from the underworld,** they undertake geographical travels that steadily spiral inward until they reach their destination. **Their search for knowledge is,** in a sense, **synonymous with their search for the Center.** The Center represents the physical existence of Zuni, the middle of any place, the time of the winter solstice, a person's heart, and that person's essence as the Center when ritually observing the six directions or offering sacred prayer meal.<sup>19</sup> **The vehicle for attaining this knowledge, for finding the Center, for reaching the moon, is ceremonial activity, not travel in a spaceship. Also apparent in these examples is the Native American emphasis on process rather than product; on the unity of all beings in the act of harmonious existence.** For the Puebloans, **the moon,** like the sun, **is not an object to be walked on or traveled to, but a living being whose light is drawn through the kiva hatchway during certain rituals.** They draw the sun, too, into the kiva at certain times and often construct buildings so that rays of sunlight will enter a window or porthole and strike a specific niche at ceremonially and calendrically important times of the year.<sup>21</sup> The interplay of light and shadow at such sites seems to be a celebration of the event-an "inviting in" of the sun or the shadows it casts-an incorporation of the sacred into the structure itself.<sup>22</sup> This perception of the sun and moon as living beings who enter the sacred space of the kiva at ritually significant times of the year is a phenomenon similar to that described earlier: the behavior of the clowns during a Zuni rain dance that served to equate the kiva with the moon for a circumscribed period of time. Both instances are part of a sequence of ritual activities in which a condensation and intensification of experience occur-a collapsing of "inner" and "outer" into one entity.

Thus, the Puebloans in particular, and Native Americans in general, do not view space and the beings who reside there as external to ceremonial life, nor do they regard them as material objects that they can own, control, or overcome. According to this perspective, **there are no rigid boundaries between the spiritual and physical;** or, if such

boundaries exist at all, they are fluid and permeable. **The cosmos is one entity;** the beings within it operate according to the principles of continuity and similarity-principles evident in the unification of inner and outer space in the context of ritual activity. For most Native American groups, this continuity applies to time as well as to space. Although they may introduce a myth as having occurred "a long time ago" or "in the beginning," they do not envision the events of the myth as over and done with, situated at a single point in a linear flow of time; instead, they perceive them as ever-present, informing the here and veils, among much else, the presentness of the beings of myth and folktale to Native Americans. Coyote and Flintwing Boy are there-or-here-to warn the people about the monster with metal legs. The Pueblo attitude towards time and space is perhaps closer to that of relativist physics, in which space and time exist as a single continuum that is relative to the observer, than it is to the "linear perspective of the average member of Western society."<sup>24</sup> For the Pueblos, time is cyclical, apparent in the orderly and regular motions and "returns" of the sun, moon, and stars; and both time and space are organic, continuous entities. One may say that for them time is reversible; past, present, and future coexist. The Zunis believe that when people die four times, they return to the time and place of myth, completing the human cycle of reincarnation; yet they may return to the present in another form if they so desire. Many of them go to Kachina Village that has not only mythic existence in the past, but physical existence in the present at a specific lake in Arizona. Further, in the context of sacred performances, the gods return again and again. The ka-china dancers in the plaza do not represent the gods, they become the gods; and the time of the myth is one with the present. The efficacy of ritual activity is the result of the merging of the here and now with the time and space of myth. Thus one might describe the Zuni view of the universe and its dimensional aspects as a unified and orderly phenomenon, symbolized by the directional model that links a complex web of associations, extending to include "everything." I suggest that it is this view of time and space as cyclical and organic, illustrated by the Zuni example but common to many Native American groups, which stands in opposition to the "Western" view that one travels linearly, through space and in time to land on the moon. If one lived in a world in which the time and place of myth interacted with the present, there would be no need to go to the moon to gain knowledge

## Contention 1: Avoiding the mistakes of our ancestors and learning from the past

**The effort to colonize space is a form of colonial world-building linked to the racist legacy of colonialism on Earth. That colonialist legacy will influence who is included in the space appropriation project.**

**Haskins**, Caroline. "The Racist Language Of Space Exploration." The Outline. August 14, 2018. Web. December 12, 2021. <<https://theoutline.com/post/5809/the-racist-language-of-space-exploration>>.

"You could argue that **the effort to colonize space is likely to involve new forms of inequality:** shifts in tax revenues and administrative priorities devoted to that," said Michael Ralph, a professor of anthropology at NYU. "As opposed to [supporting] other social institutions that benefit people like health care, education, infrastructure." Earning money in space is an exciting prospect for a far-right, pro-business, anti-regulation politician like Cruz, and he explicitly associated it with European countries having colonized the Americas. Starting in the late 1400s, Great Britain, Spain, and Portugal funded missions to the Americas in order to gather natural resources that would power up their economies. By stealing the land that made this resource extraction possible, colonizers used genocide, enslavement, biological weaponry, and warfare and that resulted in the deaths of tens of millions of indigenous people living in the "New World." The concept of race, and therefore racism, was invented as a way of justifying their violence and legitimizing a hierarchy of race-divided labor. Based off of what we know right now, the Moon and Mars are devoid of life, so this colonizing language is not actually putting other beings at risk. But, there is the risk that the same **racist mythology used to justify violence and inequality on earth — such as the use of frontier, "cowboy" mythology to condone and promote the murder and displacement of indigenous people in the American West — will be used to justify missions to space.** In a future where humans potentially do live on non-earth planets, that same racist mythology would carry through to who is allowed to exist on, and benefit from, extraterrestrial spaces. On Earth, and in the United States specifically, the ideal of a merit-based society has been used to justify race-blind hiring policies that fail to account for, say, the implicit bias against black or Asian-sounding names, or the legacy of segregation, which continues to make children of color more vulnerable to attending underfunded schools. Narratives of "law and order" have also been used to justify racial profiling and harsher prison sentences for people of color than for white people who commit the same crimes.

**Not nearly enough work has been done here on Earth to ensure that these structural inequalities wouldn't carry through.** "Those narratives do carry specific implications about how people living on other worlds might be structured," Lucianne Walkowicz, the current Chair of Astrobiology at the Library of Congress, told The Outline. Walkowicz organized the Decolonizing Mars Conference that took place on June 27 as well as a public follow-up event planned for September, to discuss how colonial language is shaping our potential future in space. "Space is not just built for nothing, it's built for people." When we think about humanity's potential to exist on other planets, it's important to consider who won't have access to space, in part due to a total lack of concern over these issues by people who are able to access it. Amazon CEO Jeff Bezos intends to make space a place for the rich to use for adventure leisure, and SpaceX/Tesla founder Elon Musk has proposed that a Martian "colony" can save a selection of humanity from the collapse of civilization in some World War III scenario. Granted, right now, these are just words from billionaires who want to excite the public about their business ventures. But they suggest that if **the economically and socially vulnerable are priced out of a life-saving journey from Earth,** it is a justifiable loss. "All of these things that are said off the cuff [by billionaires] have some implications that are concrete and count some people in, and some people out," Walkowicz said. Part of that concern is fueled by the fact that Cruz and Pence have presented the path to

settling space as one that will be privately funded, but lead by the U.S. government. In the Destination Mars subcommittee meeting, Cruz said, "At the end of the day, the commercial sector is going to be able to invest billions more in dollars in getting this job [of getting to Mars] done." In his Thursday remarks regarding the Space Force, Pence also implied that celestial territories would be treated as private property (even though owning private property in space is explicitly illegal per the Outer Space Treaty, which the U.S. and dozens of other nations signed in 1967). "While other nations increasingly possess the capability to operate in space, not all of them share our commitment to freedom, to private property, and the rule of law," Pence said. "So as we continue to carry American leadership in space, so also will we carry America's commitment to freedom into this new frontier." This approach to public-private partnerships directly mirrors colonist practices. For instance, the British East India Company violently colonized parts of India on behalf of the company, but over time, ownership of the stolen land shifted to Great Britain. While these risks feel a part of a far away future, in the present, idealizing colonization as a positive, replicable aspect of American history speaks to an unsettling indifference from leaders about the violent history of colonization. And by referencing historical events that victimized people of color, leaders paint a vision of the future in which people of color continue to be excluded, Walkowicz said that the social and economic legacy of colonization is ignored.

## Private appropriation and commodification of space is connected to the historical legacy and present-day practices of colonialism.

**Tavares**, Frank. "Ethical Exploration And The Role Of Planetary Protection In Disrupting Colonial Practices." Planetary Science and Astrobiology Decadal Survey 2023-2032. October 25, 2020. Web. December 11, 2021. <<https://arxiv.org/ftp/arxiv/papers/2010/2010.08344.pdf>>.

Commodification and Appropriation of Land and Resource Extraction: **The commodification of land through extractive practices has led to significant disruption of the ecosystems that Indigenous communities rely upon for their livelihoods.** Examples of extractive exploitation and colonialism abound; while many people in the US think only of the gold rush, mining of rare minerals in Central and South America and Africa incentivize and continue to accelerate colonial expansion even today. Agricultural practices throughout the colonial world have been and continue to be damaging, transforming environments and destroying human lives and cultures. From cotton fields in the American south to sugar plantations and rubber tappers in Brazil, the combination of land and people as property was key to the generation of wealth that built up the Western world. **20 The field of planetary science and space exploration in the present day is not divorced from these practices, and both existing and planned space infrastructure continue to encroach upon Indigenous land.** This is often justified by falsely framing opposition to such encroachments as "obstructions" to "the future." **21** For example, **construction of the Thirty Meter Telescope atop Mauna Kea has begun despite opposition from many Kanaka ʻŌiwi (Native Hawaiians), who note that previous astronomy development atop Mauna Kea has already had substantial adverse effects. Current structures for in-situ resource utilization on other worlds are analogous to some of these past and current practices on Earth.** Most immediately, lunar resource maps seek to enable public and private sector mining actors to plan for extraction of water ice and other resources. Similar proposals exist for asteroid mining. This is presented under a guise of "sustainability," but in actuality replicates the practices of extractive capitalism that have contributed to the environmental degradation of Earth. In the long-term, this exploitative approach to extraterrestrial exploration will be similarly detrimental, and recommendations provided in the white paper "Asteroid Resource Utilization: Ethical Concerns and Progress" address these issues in more depth. **23 Public-Private Partnerships as a Colonial Structure: Private individuals and institutions, in collaboration with governments, are a key aspect of the colonial structure. For example, the East India Company was fundamental to British expansion across the Eastern hemisphere and took a central role in colonial domination and political control as well as trade. More recent examples include the influence of American fruit companies in the United States' interventions into Latin American politics during the Cold War. In the United States, treaties signed with Native American nations have repeatedly been broken, often by settler colonialist individuals working in tandem with the US government and military. The Dakota Access Pipeline, a modern reframing of the ongoing Indigenous demand to honor the Black Hills Treaty, illustrates how capitalist interest intersects with colonialism today. These examples**

**are mirrored in the active role private industry is currently taking in space exploration.** Presently, there is little to no oversight by national governments or international structures. Private partnerships are encouraged to plan missions to the Moon and Mars, often supported by state funding. However, **there is a lack of concrete and effective policy to guide their actions, and no consequences are levied when existing policies are violated.** For example, the privately-funded and state-operated Beresheet lunar lander crashed on the Moon and accidentally released thousands of tardigrades. At present, bodies like the Moon and Mars are in practice free reign for private entities. An unfortunately accurate euphemism is that we are in a “wild west” of space policy in this regard. When faced with complex and nuanced ethical questions like the ones we will face in space exploration, **private actors, by their very structure, will prioritize economic considerations above moral ones.** History, through the examples above and others, shows us that they will.

## **Attempts to colonize space have material harms for Indigenous people on Earth, in the form of violent dispossession. Smiles, Deondre.**

“The Settler Logic Of (Outer) Space.” Society + Space. October 26, 2020. Web. December 11, 2021. <<https://www.societyandspace.org/articles/the-settler-logics-of-outer-space>>.

But we cannot forget the concept of terra nullius and how our exploration of the stars has real effects on Indigenous landscapes here on Earth. We also cannot forget about forms of space exploration that may not be explicitly tied to military means. Doing so deprives us of another lens through which to view the tensions between settler and Indigenous views of space and to which end is useful. Indeed, **even reinscribing of Indigenous space towards ‘peaceful’ settler space exploration have very real consequences for Indigenous sovereignty and Indigenous spaces.** Perhaps the most prominent example of the fractures between settler space exploration and Indigenous peoples is the on-going controversy surrounding the construction of the Thirty Meter Telescope on Mauna Kea, on the island of Hawaii. While an extremely detailed description of the processes of construction on the TMT and the opposition presented to it by Native Hawai’ians and their allies is beyond the scope of this essay, and in fact is already expertly done by a number of scholars[i], the controversy surrounding TMT is a prime example of the logics presented towards ‘space’ in both Earth-bound and beyond-Earth contexts by the settler colonial state as well as the violence that these logics place upon Indigenous spaces, such as Mauna Kea, which in particular already plays host to a number of telescopes and observatories (Witze, 2020). In particular, astronomers such as Chanda Prescod-Weinstein, Lucianne Walkowicz, and others have taken decisive action to push back against the idea that settler scientific advancement via space exploration should take precedence over Indigenous sovereignty in Earth-space. Prescod-Weinstein and Walkowicz, alongside Sarah Tuttle, Brian Nord and Hilding Neilson (2020), make clear that **settler scientific pursuits such as building the TMT are simply new footnotes in a long history of colonial disrespect of Indigenous people and Indigenous spaces in the name of science**, and that astronomy is not innocent of this disrespect. In fact, **Native Hawai’ian scholars** such as Iokepa Casumbal-Salazar **strike at the heart of the professed neutrality of sciences** like astronomy: One scientist told me that astronomy is a “benign science” because it is **based on observation, and** that it is universally beneficial because it offers “**basic human knowledge**” that everyone should know “like human anatomy.” **Such a statement underscores the cultural bias within conventional notions of what constitutes the “human” and “knowledge.”** In the absence of a critical self-reflection on this inherent ethnocentrism, **the tacit claim to universal truth reproduces the cultural supremacy of Western science as self-evident.** Here, the **needs of astronomers for tall peaks in remote locations supplant the needs of Indigenous communities on whose ancestral territories these observatories are built** (2017: 8). As Casumbal-Salazar and other scholars who have written about the TMT and the violence that has been done to Native Hawai’ians (such as police actions designed to dislodge blockades that prevented construction) as well as the potential violence to come such as the construction of the telescope have skillfully said, **when it comes to the infringement upon Indigenous space by settler scientific endeavors tied to space exploration, there is no neutrality to be had—dispossession and violence are dispossession and violence, no matter the potential ‘good for humanity’ that might come about through these things.**

## **Mega-constellations of satellites, such as Starlink by SpaceX, cause light pollution---this is another form of colonization because of the devastating effects it has on indigenous people. Nielson, Hilding.**

“Indigenous Rights, Peoples, And Space Exploration: A Response To The Canadian Space Agency (CSA) Con.” Arxiv (open-access archive). 2021. Web. December 11, 2021.

<<https://arxiv.org/ftp/arxiv/papers/2104/2104.07118.pdf>>.

Megaconstellations of Satellites is Colonization The launch of Starlink by SpaceX has had a dramatic and damaging impact on research in astronomy and astrophysics (Clery 2020, Kocifaj 2021). **These satellites have added to the amount of light pollution and future satellite constellations could have far greater impact** depending on the legal requirements and the purpose of those satellites. Hamacher et al (2020) presented a compelling argument that **light pollution is a form of** cultural genocide (please note that in the context of the Final Report of the Truth & Reconciliation Commission we will use the term **Indigenous erasure** instead). In their article, the authors noted that **a significant amount of Indigenous knowledge is based on star lore and observations of the sky**. Those observations are connected to Indigenous stories about the land and nature - for some peoples the sky is a reflection of the land (Cajete 2000). **Those observations, however, are based on a dark night sky without substantive light pollution. As such, light pollution acts to disconnect Indigenous peoples from the land they live, and as such is a form of erasure.** In the same vein, we argue that constellations of satellites are also a form of colonization, especially those that are bright enough to be visible from the ground. **If light pollution results in an erasure of knowledges, then megaconstellations of satellites would also constitute an attempt to rewrite that knowledge.** There is a second issue that the CSA should consider with respect to space exploration and the impact of new satellites. That issue is at what height do treaties and agreements with Indigenous peoples, end? It is understood that treaties have impact on Indigenous rights and responsibilities with respect to mining, water resources, hunting, etc. but Indigenous communities should be consulted with the impacts on the skies above. This is especially true for satellites that contribute to light pollution, but also satellites that are designed to offer services to communities (such as wireless internet), satellites designed for groundbased or remote imaging such as mapping satellites and LIDAR imaging. The CSA has an obligation to consult with Indigenous communities and Indigenous-led organizations with respect to the legalities of how satellites that impact communities operate.

## **Indigenous people are still silenced during consultation processes, so prior consultation fails to be an alternative to the Aff. Townsend, Leo.**

“Consultation, Consent, And The Silencing Of Indigenous Communities.” Journal of Applied Philosophy. May 25, 2020. Web. December 12, 2021. <<https://onlinelibrary.wiley.com/doi/full/10.1111/japp.12438>>.

Conclusion Historically, **Indigenous peoples have been denied a say in decisions about their lands and livelihoods.** The growing recognition of Indigenous rights to consultation and consent in international and domestic law has sought to recognise the sovereignty of Indigenous peoples and to ensure their participation in those decisions. However, we have argued that the interpretation and implementation of these rights has meant that communities are still routinely silenced within these decision-making processes. To illustrate this, we have examined three cases in which, we argue, **Indigenous communities have been silenced despite the appearance of a fair participatory process.** Using the theoretical framework of feminist speech act theory, and in particular the Austinian approach to silencing developed by Hornsby and Langton, we have illuminated three ways in which Indigenous communities can be silenced as group speakers in participation processes. Locutionary group silencing occurs when the platform for group speech is occupied by someone who lacks the proper authority to speak for the group, and so the opportunity for group speech elapses. Illocutionary group silencing occurs when a group's attempts to perform certain speech acts are not given appropriate uptake, and so fail. And perlocutionary group silencing occurs when the perlocutionary aims of a group's speech are systematically blocked. This investigation of practices of group silencing in community consultation has both philosophical and legal value. From a philosophical perspective, while questions about the possibility and nature of group speech have been gaining increased attention in recent years, questions about the politics of group speech have been roundly neglected. In light of the substantial role played by collective bodies— governments, institutions, communities, etc.—in public discourse, this is a serious lacuna in the literature. Highlighting practices in which the speech of certain groups is disempowered helpsto bring these neglected questions into view, while the framework of feminist speech act theory helps to identify certain distinctive ways in which group speech can be disempowered. From a legal perspective, the value of applying this framework for thinking about speech acts and silencing is that it reveals how Indigenous communities can be denied a proper say even when they have been ‘included’ in deliberations and decision-making. In this way, it tells us something about the requirements of truly meaningful consultation and consent. **While rights to consultation and consent are meant to ensure Indigenous communities get a say in decisions that affect them, if these rights are**

not appropriately implemented and interpreted, they can fail to give Indigenous communities a proper say, and succeed only in silencing and marginalising them further.

## Colonization will indirectly lead to genocide

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While Bezos and Musk are right that colonizing space will not result in the genocide of nonexistent extraterrestrial populations, **the colonial destruction of indigenous communities was** but **one** component **in a** global **regime of racial violence**. Indeed, the **labor needed to support** the system of **colonial-capitalism in the United States** **fueled** the atrocities of **the Atlantic slave trade**. **In pursuit of** America's **"manifest destiny"** along the Western frontier, white **railroad company owners brutally exploited Asian migrants**. **One in ten** Chinese **laborers died building the transcontinental railroad**. It is no coincidence that casual discussions of colonization are happening in an industry that is still dominated by white men. Bezos has said that he first became obsessed with space when he was five years old, watching the Apollo moon landing on television exactly fifty-two years before his plans to launch himself into space. Listening to Bezos and Musk speak about their childhood obsession with rocket ships to adoring crowds, one perceives another reason why two of the richest men on Earth are spending billions in public money to get to space: they think it's cool. One wonders what the five-year-old Bezos would have thought upon learning that **Wernher von Braun, whose work was foundational to the Apollo program, was a former Nazi**, or that **he used slaves to build his rockets** in wartime Germany—**20,000 of whom died** in his factory. **Utopian dreams, even in space, always have a human cost**. Remember that the labor needed to support colonial-capitalism in the United States fueled the atrocities of the Atlantic slave trade.