# 1NC

## 1

### T—Appropriation

#### A topical affirmative must prohibit appropriation of areas of outer space.

#### They violate—they only regulate resources from space.

#### 1. Legal precision—their plan misinterprets the OST. Taking things from space is not appropriation “of outer space”

Baruah and Paliwal 15

Rishiraj Baruah (International Institute of Air and Space Law, Leiden University, Netherlands) and Nandini Paliwal (International Institute of Air and Space Law, Leiden University, Netherlands). “Sustainable Space Exploration and Use: Space Mining in Present and Future Perspectives.” International Astronautical Federation, Paper IAC-15,E7,1,3,x29545. 2015. JDN. https://swfound.org/media/205300/rishirajbaruah-sustainable-space-exploration-and-use.pdf

For promoting mining in outer space, the distinction between **appropriation of an area** or part thereof by claim of sovereignty must be distinguished from **appropriation of** particular **resources** existing in that area.25 The national appropriation principle discussed prohibits any public or private property rights in outer space. Now, any interpretation of a treaty has to be done by reference to its context and object and purpose.26 Article I literal 1 of OST read with Article I literal 2 OST forwards a view that as the exploration and use of outer space should be carried out for benefit and in interests of all countries, any claim of sovereignty in outer space would run contrary to Article I literal 1.27 Hence, the purpose of Article II is to prevent exclusive claims to outer space due to its res communis nature.28 The resources present in a commons regime can be exploited by all. For example, fisheries wherein the area is a common pool and the resource i.e. the fishes can be utilized by everyone. 29 Just as the mineral resources in the High Seas are open to all, subject to international regulations, outer space mineral resources are open to all.30 Freedom of exploration and use is the fundamental principle of space law and has **no express prohibition** on exploitation of mineral resources. As a corollary to the freedom of exploration and use in the OST, the residuary rule of presumptive freedom of action as a principle of international law, permits what is not prohibited.31 Jurists like Professors Gorove 32 and Jenks33 opine that the non-appropriation principle applies only to landed areas of the moon and other celestial bodies and does not extend to mineral resources. Keeping in view the aforementioned contentions, it can be said that **the** national appropriation **principle only prohibits appropriation of ‘areas’ in outer space** including the Moon and other celestial bodies, however does not prohibit the appropriation of mineral resources in outer space. The Space Benefits Declaration34 can be considered as an interpretation of Article 1 of the OST.35 While the Declaration expands the OST with regard to apportionment of benefits, it does not prohibit the appropriation of resources. In presence of express prohibition of public and private property rights in Article II of OST, if the appropriation of natural resources was also to be prohibited, then such stipulation should have been included. Hence, it can be concluded that appropriation of natural resources are not prohibited under the OST, while the amount of international cooperation in benefit sharing that a state is willing to do is at its own discretion in accordance with the Space Benefits Declaration.36

#### 2. Ground—their interp lets in tiny trivial affs, like banning auctions of moon rocks, or nationalizing meteorites because those came from space. Those evade the core topic question of what legal regime should exist in space.

#### Vote neg—T is a question of competing models so it doesn’t matter if their plan seems fair in isolation. You should use competing interps to avoid judge intervention.

## 2

### NC

#### The right to appropriate is a priori—it’s the only non-contradictory system of property

Dominiak 17

Łukasz Dominiak (Associate Professor at Nicolaus Copernicus University in Poland; he holds a PhD and habilitation in political philosophy and is a Fellow of the Mises Institute). “Libertarianism and Original Appropriation.” Historia i Polityka, 29/2017: 22. Pp. 43-56. JDN. <https://apcz.umk.pl/HiP/article/view/HiP.2017.026/13714>

In this last paragraph we would like to focus on what we claim is the best justification for the first possession theory of **original appropriation** and what are the ramifications of both this theory and its justification. We suggest that the ultimate justification of this theory is not usually evoked avoidance of conflicts – although it is a necessary consequence of the justification we are going to present here – but **a necessary condition of rationality of a conceptual system** (it is good to remember that rights have form of deontic propositions and therefore they also form a conceptual or theoretical system). Let us present a sketch of our argument.

For a conceptual system to be rational it is necessary to be non-contradictory (Popper, 2002). Nothing that violates the law of non-contradiction can be true, justified or for that matter rational (Łukasiewicz, 1987, 1988). In a system of rationally justified rights – so-called natural rights – existence of contrary rights and duties, let alone contradictory ones is ex definitione off limits since contrary rights violate the law of non-contradiction. As Steiner puts it with reference to rights as such, although his argument seems to work impeccably only with natural rights, “mutual consistency – or compossibility – of all the rights in a proposed set of rights is at least a necessary condition of that set being possible one. A set of rights being a possible set is, I take it, itself a necessary condition of the plausibility of whatever principle of justice generates that set. Any justice principle that delivers a set of rights yielding contradictory judgements about the permissibility of a particular action either is unrealizable or (what comes to the same thing) must be modified to be realizable” (1994). Hence, systems of rights in which there are contradictory or contrary rights is off limits insofar as its rational justification is concerned. Basically, such a system can never be rationally justified. It is obvious on the other hand that one of the most important and direct ramifications of a system of non-contradictory rights is avoidance of conflicts. It is the case be-cause for a person who abides by the norms of such a system it is impossible to find himself in the situation of conflicting rights or duties. So, on our account it is not so much that property rights are justified functionally or teleologically as being conducive to conflict avoidance as that their function of conflict avoidance is a logical consequence of their fundamental vindication as rational (non-contradictory) allocations of individual jurisdictions (Barnett, 2004) or spheres of freedom (Steiner, 1994).Now the question is: What set of rights can be a set of non-contradictory rights? Following Steiner we can say that rights predicate about human action. Because each action-token always takes place in a specific time and space, it can be given an exhaustive description in extensional terms of its spatio-temporal components. We can therefore say that two action-tokens are incompossible when they share at least one physical component; on the other hand, action-tokens are com-possible when they do not have any physical components in common. Now, rights that “oblige” people to perform two or more action-tokens that share at least one physical component are perforce contradictory rights – they “oblige” people to do what is incompossible to do; whereas rights which oblige people to perform action-tokens that do not have common components are non-contradictory rights. How to make sure that rights never become contradictory? It is necessary and sufficient to construe of rights as rights to **exclusive control of physical components** of actions, i.e. As rights to possess tangible things. If physical components of actions are unequivocally distributed amongst people, if each and every physical component is unambiguously and exclusively assigned to one and only one person, then there can never be rights to action-tokens that share physical components with each other and therefore there can never be rights that oblige people to perform incompossible action-tokens (Steiner, 1994). As Steiner points out, “a set of categorically compossible domains, constituted by a set of property rights, is one in which each person’s rights are demarcated in such a way as to be mutually exclusive of every other person’s rights... we will interpret this to mean that no two persons simultaneously have rights to one and the same physical thing” (1994).

Because the nature of possession is such that it is impossible for two or more people to possess the same thing at the same time – although it seems possible for two or more people to simultaneously mix their labour with the same thing (e.g. when two people chase the same wild animal) – then **assigning rights to** people who took **first possession** of a thing, who are first-comers, perforce avoids non-contradictoriness of rights and conflicts between people since the dawn of time. For it is always and from the very beginning clear who has title to which physical resource as well as which resources are still up for appropriating and which are not so available. As Hans-Hermann Hoppe writes, “with regard to the purpose of conflict avoidance, **no alternative to private property and original appropriation exists.** In the absence of prestabilized harmony among actors, conflict can only be prevented if all goods are always in the private ownership of specific individuals and it is always clear who owns what and who does not. Also, conflicts can only be avoided from the beginning of mankind if private property is acquired by acts of original appropriation (instead of by mere declarations or words of latecomers)” (2012). It is **by definition inconceivable** for more than one person to be in a position in which it is physically possible to deal with a thing at will to the exclusion of others. Neither is it conceivable for more than one person to simultaneously come to such a position. Thus, taking first possession of scarce resources as basis of title and as principle of justice in original appropriation guarantees non-contradictoriness of rights and avoidance of conflicts since the dawn of time.

#### Therefore negate—private appropriation of space is deducible from first principles. There is no morally relevant distinction from terrestrial property

Baca 93, Associate at Gallop writes in 1993 for the SMU Journal of Air Law and Science

[Kurt Anderson, (Associate at Gallop, Johnson & Neuman, St Louis, Missouri), Property Rights in Outer Space, 58 J. Air L. & Com. 1041, 1993, <https://scholar.smu.edu/jalc/vol58/iss4/4>, accessed 6-24-21]

The powers necessary to constitute an efficient system of property rights on Earth have been found, by deduction from first principles by political philosophers influential in the development of the Western institutions and from history and practice in the courts, to be the power to exclude, to use, and to dispose. 98 The resulting system is also inherently equitable as it benefits society as a whole and as it protects investments and expectations. This system would remain equitable so long as the initial allocation of any new resource was, and is, not based on mere usurpation of unclaimed property, but is based on investment in the property that adds to its value. 99

This system of property rights relies on the provision of powers to the holder of the property. The source of the power is ultimately in the state that enforces the liabilities of parties corresponding to the powers of owners: the liability to exclusion, the liability for interference with use, and the liability to respect contracts and to refrain from hindering disposition. °0 This implies that sovereign power is essential to any functioning system of property rights, and in the absence of a general sovereign body, sovereignty is to be found in the nation-state.

How does the extension of man's [humanities] activities into space and onto the celestial bodies change the basic necessities of an efficient and equitable property rights system? The movement of activities into space affects only the place of activities. The nature of those activities and of the actor remain unchanged. The nature of efficiency and equity are likewise unchanged, and the need for certain securities and guarantees to foster productive activity by man is unchanged. The same property rights system that is most beneficial on Earth will be most beneficial on the celestial bodies.

The principles of the Outer Space Treaty do not necessarily contradict these property concepts. It has already been shown that the notion of property rights, including the power to use and dispose, are not incompatible with the general principles of the Outer Space Treaty.20 ' The principle of access in space is also appropriate when properly interpreted. ° But, in regulating access, governing bodies must make proper account for the use of various portions of space and of the rights of the user to be free of harmful interference. 3 Although the provision of Article II against national appropriation contradicts these property concepts, it is inconsistent with the notions of jurisdiction and ownership found elsewhere in the treaty.2 0 4 This provision should therefore be modified and replaced with a concept of reasonable use or investment.20 5 Such a provision should provide for initial allocation of unclaimed property only upon productive use or investment. This would allow for the security of national sovereignty while preventing the non-productive reservation of vast resources by non-users.20 6

## 3

### Counterplan

#### Counterplan: Space-faring nations should establish an international organization that allows private appropriation of outer space, subject to environmental review.

#### It solves better than the aff. Regulation is still possible alongside privatization, BUT ownership rights are key to incentivize environmentalism.

Reinstein 99

Ezra J. Reinstein (JD, Associate at Kirkland & Ellis), Owning Outer Space, 20 Nw. J. Int'l L. & Bus. 59 (1999). JDN. <https://scholarlycommons.law.northwestern.edu/njilb/vol20/iss1/7>

One reason for the inadequacy of the current law might be that its formulators did not correctly foresee the course space development would take. The approach taken by the OST and Liability Convention resonates with the expectation that space activity would remain limited to periodic governmental exploratory missions.89 I suggest two ways to bring space environmental law into the modem space age of ubiquitous commercial activity.

**First** of all, **an approval process**, overseen by an international organization, must precede any actual development. This would be similar in function to the International Telecommunications Union ("ITU"), an organization whose most essential duty is to certify that proposed communications satellites will not interfere with each other.90 Any party wishing to engage in the development of space would first present a proposal to the overseeing organization. The organization would then only grant project approval after an environmental review, ensuring that the project complies with environmental standards agreed to by COPUOS.

Making approval dependent on environmental compliance does not destroy the dual goals of efficient usage and wealth maximization. Far from it. Environmental safeguards embody the recognition that environmental degradation harms humanity in very real ways: it can endanger our health and lives, and can ruin a site's utility. It doesn't bear belaboring this point; an example should suffice. Without environmental precautions, a mining corporation might dirty a distant planet's lone water supply, forever deadening a world that might have grown into a great and productive colony. Similar has happened on Earth many times. It can happen in space.

Another way to solve the problem of space environmental ruination is by **accepting the right of ownership** into our system of space law. It would be a simple but effective step in the right direction. As Lawrence Roberts has written, the current law "is **rather damaging from an environmental perspective**," because "without a means to secure control of a resource in the ground," i.e. without ownership, "each individual developer will seek to maximize his or her own gain by extracting as much value as quickly as possible without regard to the effect on the communal resource. 9 '

Ownership creates a strong incentive to act with an environmentalist ethos. As owner of a site, SpaceCorp would want to maximize the site's value. This self-interest protects the environment in two related ways. First, because SpaceCorp is not just a squatter on a plot of celestial territory, because it will have more than an expiring usufructary interest, SpaceCorp will avoid wanton despoliation of the land. Despoliation would reduce the value of the property to a purchaser, and thus SpaceCorp's potential revenue. Poor land management might also harm SpaceCorp's current interests, if its actions contaminate its own site to the point that its settlement loses viability. Second, SpaceCorp will avoid ripping through the site; instead, it will either preserve materials it does not use to **maximize** the site's **resale value**, or it will itself use the site as fully and efficiently as possible. SpaceCorp will either use the site with preservationist techniques, sparing the site from wasteful destruction, or it will use the site as a conservationist, i.e. wholly and completely, sparing other sites from exploitation. The incentive to use space non-wastefully, discussed above in the context of economic efficiency, clearly has positive environmental repercussions. An owner has an interest in keeping his own site clean, as well as using it with minimal waste and maximum efficiency, because if he wants to eventually sell the property, any despoliation will devalue it. This carrot, because it is self-executing, is better than any stick.

Of course, the right of ownership would not make an environmental violation whose harm extends onto another site less likely -- but it wouldn't make it more likely, either. As under the current system, **lawsuits should still be available** to remedy harms. Hopefully the requirement of environmental review would act as a prior restraint to prevent these harms. And ownership, by creating an incentive to care about one's own property, protects the interests of others: both those nearby (who instantly feel the effects of more care given to, e.g., waste disposal and water management), and those who come later.

#### Second, it independently solves their war scenarios. The aff advantage relies on putting the US back in lockstep with ILaw. The counterplan puts ILaw in lockstep with the US. Either way, fiat solves legal disputes between countries because post-counterplan they’re all on the same page, the same as in the aff world.

## 4

### DA

#### The legal framework that strikes the best balance of providing economic incentives for mining while preventing unbeneficial land claims requires a doctrine of appropriation – the plan prevents that

Meyers, a J.D. Candidate, writes for Oregon Review International 2015

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

The **doctrine of appropriation** is a reasonable rule for adjudicating asteroid claims, and it could **easily be modified to apply to asteroid mining**. In the context of water rights, the doctrine of appropriation requires that the claimant be a landowner in order to claim the right to use a water source. It does not make sense, however, for the international community to grant complete ownership over asteroids toa single entity, so the landowner requirement of the rule should be removed. A similar modification would need to be made to the "beneficial use" language of the doctrine.

In the context of water rights, an appropriator obtains rights only to water that he or she can reasonably put to beneficial use. The metals contained in asteroids have a high level of marketability. For that reason, a mining entity could potentially put any amount of obtained metal to beneficial use, in the sense that the resources can be sold. This, however, would defeat the purpose of the rule, which is to limit such unreasonable claims. To ameliorate this problem, the doctrine of appropriation could be modified to define "beneficial use "constructively by providing that beneficial use is assumed for any resources that have been removed from the asteroid that the mining entity can reasonably hope to transport to market in a return journey. With the **astronomical cost** of undertaking a trip to such an asteroid, this modification would limit mining entities to only what they can carry back, thereby leaving the untapped resources available to other entities capable of making the same trip. Considering the size and profitability of metal deposits on asteroids, this modification to the doctrine of appropriation would **not be overly burdensome to corporate interests**. At the same time, it would **satisfy the economic imperative of promoting the rapid development of asteroid resources.**

By changing the landowner requirement, and qualifying the “beneficial use" language, the doctrine of appropriation would be essentially ready for application to asteroid mining claims. The only other changes necessary would be some additional requirements that are common to other space related provisions, like those found in the Outer Space Treaty of 1968. For example, a reporting requirement or clause guaranteeing asylum for other astronauts. A functional rule might read something like this:

*State parties or private entities may, upon actual possession, lay claim to natural resources found on or below the surface of asteroids. Rights to appropriate are given in order of seniority, starting with the first party to land on the surface of the asteroid and establish control over the resources, be it water, methane, metal, or any other beneficial substances. A party will be said to have established control over a resource once he has mined the substance and removed it from the asteroid. A senior appropriator may use as much of the asteroid's resources as he can take from the asteroid and put to beneficial use, and may continue to enlarge his share until another junior appropriator begins to appropriate resources from source for beneficial use. For the purposes of this Agreement, "beneficial use “refers to the amount of resources that an appropriator has removed from the asteroid that the actor may reasonably hope to bring home in a return voyage. Resources in excess of what an appropriator can reasonably hope to transport to market in a single voyage do not qualify as having a beneficial use, and are therefore not yet claimed. This means that the extraction of metal from an asteroid does not serve to provide ownership if the appropriator plans on letting the resources languish until another voyage is undertaken to secure the resources and bring them back to Earth. Junior appropriators receive rights in the source of resources (the asteroid) as they find it, and may prevent the senior appropriator from enlarging his share to the junior appropriator’s detriment under a no-injury rule. No state party will attempt to hinder other parties from landing on or using the asteroid, and parties will assist other entities on an asteroid, should they need emergency assistance. Mining claims on asteroids will be reported to the Secretary-General of the United Nations, and state parties agree to release the location of the asteroid, and any scientific findings to the United Nations, the general public, and the scientific community. In the event that the asteroid is on a collision course with any other celestial body, all state parties agree to follow the course of action suggested by the United Nations. Should the United Nations decide the asteroid must be destroyed, no state party may claim liability for resources contained within the asteroid, but not yet captured. This provision applies only to asteroids as classified by the scientific community, and does not apply to planets, comets, meteorites, or any other celestial body not mentioned.*

There is no doubt that asteroids may be **extremely beneficial to mankind,** both as a **source of resources** and as a jumping-off point to **far off locations in space**. The human-race has progressed scientifically and technologically to the point that space travel is within commercial reach, and the need for new international laws governing the ownership of space has never been more apparent. The Outer Space Treaty of 1968made great strides in developing rational rules for space and many of its provisions should be maintained in their original form. However, by allowing ownership of asteroids under the doctrine of **appropriation**, the international community can **incentivize the exploration and development of space in a way that reflects the needs of society in general**, **without vesting an absolute monopoly in a single entity.** The doctrine of appropriation helped drive American westward expansion, and its application to space mining would help drive the human race in its expansion into the space, the final frontier.

#### Asteroid mining offsets terrestrial growth that ruins the environment and enables solar power satellites – both solve climate change, which turns the case

Veteran Journalist Taylor elaborates for Mashable in 2019

**Taylor 19** Chris Taylor is a veteran journalist. Previously senior news writer for Time.com a year later. In 2000, he was named San Francisco bureau chief for Time magazine. He has served as senior editor for Business 2.0, West Coast editor for Fortune Small Business and West Coast web editor for Fast Company. Chris is a graduate of Merton College, Oxford and the Columbia University Graduate School of Journalism. "How asteroid mining will save the Earth — and mint trillionaires." Mashable, 2019, mashable.com/feature/asteroid-mining-space-economy. [Quality Control]

The mission is essential, Joyce declares, to save Earth from its **major problems**. First of all, the fictional billionaire wheels in a fictional Nobel economist to demonstrate the actual truth that the entire global economy is sitting on a **mountain of debt**. It has to keep growing or it will **implode**, so we might as well take the majority of the **industrial growth off-world where it can’t do any more harm to the biosphere.**

Secondly, there’s the **climate change fix**. Suarez sees asteroid mining as the only way we’re going to build **solar power satellites.** Which, as you probably know, is a form of uninterrupted solar power collection that is theoretically more effective, inch for inch, than any solar panels on Earth at high noon, but operating 24/7. (In space, basically, **it’s always double high noon).**

The power collected is beamed back to large receptors on Earth with large, low-power microwaves, which researchers think will be harmless enough to let humans and animals pass through the beam. A space solar power array like the one China is said to be working on could reliably supply 2,000 gigawatts — or **over 1,000 times more power than the largest solar farm currently in existence.**

“We're looking at a 20-year window to **completely replace human civilization's power infrastructure,**” Suarez told me, citing the report of the Intergovernmental Panel on Climate Change on the coming catastrophe. Solar satellite technology “has existed since the 1970s. What we were missing is **millions of tons of construction materials** in orbit. **Asteroid mining can place it there.”**

The Earth-centric early 21st century can’t really wrap its brain around this, but the idea is not to bring all that building material and precious metals down into our gravity well. Far better to create a whole new commodities exchange in space. You mine the useful stuff of asteroids both near to Earth and far, thousands of them taking less energy to reach than the moon. That’s something else we’re still grasping, how relatively easy it is to ship stuff in zero-G environments.

#### Asteroid mining tech solves asteroid collisions - extinction

Taylor 19 Chris Taylor is a veteran journalist. Previously senior news writer for Time.com a year later. In 2000, he was named San Francisco bureau chief for Time magazine. He has served as senior editor for Business 2.0, West Coast editor for Fortune Small Business and West Coast web editor for Fast Company. Chris is a graduate of Merton College, Oxford and the Columbia University Graduate School of Journalism. "How asteroid mining will save the Earth — and mint trillionaires." Mashable, 2019, mashable.com/feature/asteroid-mining-space-economy. [Quality Control]

For those who worry about asteroids that could wipe out civilization — though luckily, this isn't likely to happen any time soon — here is a way for humanity to get proficient in moving them out of the way, fast. Indeed, the National Space Society has offered a proposal to capture the asteroid Aphosis (which is set to miss Earth in the year 2029, but not by a very comfortable margin), keep it in orbit, and turn it into 150 small solar-power satellites, as a proof of concept.

# 1AC

## Framework

### AT: ASpec

#### The neg link turns actor-specificity because my framework is specific not just to governments but to property law in particular. Dominiak proves appropriation is the only way to adjudicate competing property claim, which proves it’s more resolvable, and it doesn’t rely on intentionality. Util is comparatively worst in space specifically because distant long-term threats hundreds of years from now are impossible to predict and don’t provide a stable basis for property.

### AT: Extinction First

#### Extinction doesn’t come first; it presupposes a consequentialist framework. The neg framework isn’t aggregative, so larger impacts don’t turn it.

#### This leads to rationalization of atrocities so you should reject it. Obviously the holocaust wouldn’t become justified if it reduced extinction by 1%.

#### Plus, the neg framework sets absolute side constraints, so under moral uncertainty you should set its value to infinity.

## Advantage

### Analytic

#### The plan isn’t key to solve most of their advantage. Only the Saletta card is specifically about non-appropriation, and that card doesn’t make any solvency claims about conflict or the environment. The rest are just about regulations more generally, which can still exist via the counterplan.

### AT: Saletta

#### A commons regime fails and backfires—bureaucracy and divergent incentives

Reinstein 99

Ezra J. Reinstein (JD, Associate at Kirkland & Ellis), Owning Outer Space, 20 Nw. J. Int'l L. & Bus. 59 (1999). JDN. https://scholarlycommons.law.northwestern.edu/njilb/vol20/iss1/7

This reading is not exclusive to developing nations. In fact, evidence indicates that the U.S. Senate, while debating whether to ratify the OST, also understood this phrase to require an equitable division of space-borne wealth among all nations.51 The validity of this interpretation of "for the benefit...of all countries" is strengthened by language in U.N. Resolution 1962-XVIII 2 Adopted unanimously by the General Assembly, Resolution 1962-XVIII helped form the basis of the OST. The Resolution states that the "use of outer space should be carried on for the betterment of mankind and for the benefit of States irrespective of their degree of economic or scientific development., 53 It is not unreasonable to understand this language, with its strong egalitarian flavor, as requiring that we read "for the benefit...of all countries" as creating a legal mandate for wealth redistribution.

Such a system would likely devastate the development of space. An international body -- a necessarily political body -- would determine what degree of wealth sharing is fair to "all countries. 54 The parties that take the initiative to create and improve technology, and take the financial and physical risks that are part and parcel of the pioneering development of space, would be required to defer to international political consensus. Must all development be held hostage while this cumbersome commission is designed, negotiated, and ratified? Might not such a system be more politics-driven than profit-driven, inevitably leading to inefficient pork-barreling? Should private parties worry that profits earned at great personal risk, expense, and effort be stripped and spread, equitably or otherwise, "for the benefit...of all countries?" It is no wonder that the Moon Treaty, which represents the apex of the philosophy of forced wealth sharing, was opposed by both the United States and the Soviet Union, and has been ratified by only nine relatively minor nations.5

### Circumvention

#### Aff gets circumvented by pseudo-appropriation through occupation

Tjandra 21

Jonathan Tjandra (Legal Research Officer, High Court of Australia). “The Fragmentation of Property Rights in the Law of Outer Space.” 46(3) Air & Space Law 373. 2021. JDN. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3840765

Conversely, **it may be possible to derive a right to exclude from the right to use** in the context of outer space. In the Roman classification, the seashore was classified as res communis omnium, and much like outer space is now, means that it **could not be** the object of **private property** rights. Individuals could use the seashore but could not exclude others from using it. Recall, however, **an exception existed**: a person could place a building on the seashore and have exclusive occupation and use of that building as long as it did not unduly restrict others’ rights and for as long as the building stood. Grotius quotes Seneca and likens it to a theatre seat in Rome – seats are available to any person who cares to watch the theatre, yet the seat a one person occupies becomes theirs while they are seated on it.90 **The same** principle **could be applied to** outer **space**, if one places a physical structure on the Moon’s surface, no one else can place anything else in the exact same location purely because it is already physically occupied. As the French delegate recognized in the Outer Space Treaty negotiations, international **law had to distinguish between** acts of **appropriation and mere occupation** in the exploitation of resources.91 States might well have the sole, despotic dominion over installations they put in outer space or on celestial bodies if no one else can displace them. This is because States retain jurisdiction and control over their objects sent to space, meaning no State can interfere with another’s space objects.9

### AT: Conflict

#### No legal disputes—space property is already widely accepted; satellites prove

Buxton 4

Carol R. Buxton (Administrative Lawyer). “Property in Outer Space: The Common Heritage of Mankind Principle vs. the First in Time, First in Right, Rule of Property.” 69 Journal of Air, Law, and Commerce, 689 (2004). JDN. https://scholar.smu.edu/jalc/vol69/iss4/3

The Outer Space Treaty, which governs outer space, prevents national sovereignty claims, but does not expressly prohibit private appropriation, unlike the Moon Treaty, which prohibits both national and private appropriation of the moon and other bodies." In the past decade, the private-sector investment in telecommunications satellites has become a billion-dollar industry,8 4 and the geo-stationary orbit, the orbital space above the Equator, likely exists as "the most valuable of all space resources to date. 8' 5 Satellites in geo-stationary orbit travel at the same speed as the earth, making the satellites appear stationary over a fixed point on earth and casting large footprints over highly populated areas.8 6 In fact, a satellite in geo-stationary orbit encompasses a field of view of 42% of the earth's land surface. 7 Like the law governing the use of the seabed, the international community established an international regime to regulate and coordinate spectrum use.

### AT: Kessler---1NC

#### Kessler syndrome is a process not an event---timeframe is decades and intervening actors check.

Burns Interviewing Kessler **’**13 Corrinne Burns, interviewing Donald Kessler, who made up the concept. [Space junk apocalypse: just like Gravity? 11-15-2013, https://www.theguardian.com/science/blog/2013/nov/15/space-junk-apocalypse-gravity]//BPS

Now? Are we in trouble? Not yet. Kessler syndrome isn't an acute phenomenon, as depicted in the movie – it's a slow, decades-long process. "It'll happen throughout the next 100 years – we have time to deal with it," Kessler says. "The time between collisions will become shorter – it's around 10 years at the moment. In 20 years' time, the time between collisions could be reduced to five years." Fortunately, communications satellites are, in the main, situated high up in geosynchronous orbit (GEO), whereas the risk of collisions lies mainly in the much lower, and more crowded, low Earth orbit (LEO). But that doesn't mean we can relax. "We've got to get a handle on it – we need to prevent the cascade process from speeding up." And the only way to do that is, he says, to begin actively removing junk from space. Charlotte Bewick agrees. She's a mission concepts engineer with the German space technology company OHB System, with special expertise in space junk – specifically, how we can capture it and bring it back to Earth. While agreeing with Kessler that the movie scenario is exaggerated, she remains concerned. "Fragments of junk can naturally re-enter the atmosphere [and so be removed from orbit]. But we're at the stage where the rate of creation of new debris fragments is higher than the rate of natural removal. The orbits most at risk harbour important space assets – satellites for weather forecasting, oil spill and bush fire detection, and polar ice monitoring." Bewick highlights the case of Envisat, a defunct 8,000kg spacecraft circling Earth in an orbit that is very popular with space agencies and, hence, pretty crowded. "If Envisat collides with a piece of debris or a micrometeorite, the fragments could render the whole orbital region unusable." So can we get the junk down, I asked Massimiliano Vasile, part of the Mechanical & Aerospace Department at the University of Strathclyde and co-ordinator of the Stardust network. He told me defunct satellites in the high GEO region have, for some time, been shifted to higher "graveyard orbits" to keep them out of the way. But that's not an option for items in low Earth orbit. For this, he tells me, researchers are looking seriously into active debris removal – in-orbit capture techniques like harpooning, netting and tethering, the use of contactless systems like ion-beams or lasers, and even onboard robotics to position the junk away from high-risk orbital regions. As for middle Earth orbit – well, ideas are welcome, he says. We're in no immediate danger from Kessler syndrome – but it's not a problem that's going away. Despite Gravity's artistic license, Donald Kessler is pleased to see the phenomenon represented on the big screen. "It is very improbable that events would play out as they did in the film," he says. "But if it raises awareness, then that's great."

### AT: War---1NC

#### Kessler induces restraint, not war.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Fourth, the ubiquity of space infrastructure and the fragility of the space environment may create a degree of existential deterrence. As space is so useful to modern economies and military forces, a large-scale disruption of space infrastructure may be so intuitively escalatory to decision-makers that there may be a natural caution against a wholesale assault on a state’s entire space capabilities because the consequences of doing so approach the mentalities of total war, or nuclear responses if a society begins tearing itself apart because of the collapse of optimised energy grids and just-in-time supply chains. In addition, the problem of space debris and the political-legal hurdles to conducting debris clean-up operations mean that even a handful of explosive events in space can render a region of Earth orbit unusable for everyone. This could caution a country like China from excessive kinetic intercept missions because its own military and economy is increasingly reliant on outer space, but perhaps not a country like North Korea which does not rely on space. The usefulness, sensitivity, and fragility of space may have some existential deterrent effect. China’s catastrophic anti-satellite weapons test in 2007 is a valuable lesson for all on the potentially devastating effect of kinetic warfare in orbit.

### AT: Environment

#### Commercial development of space solves environmental decline on Earth

Reinstein 99

Ezra J. Reinstein (JD, Associate at Kirkland & Ellis), Owning Outer Space, 20 Nw. J. Int'l L. & Bus. 59 (1999). JDN. https://scholarlycommons.law.northwestern.edu/njilb/vol20/iss1/7

C. Protection of the environment in space and on Earth.

If protection of the environment were our only goal, perhaps the best rule would be to forbid humankind from expanding beyond Earth, whether personally or by mechanical proxy. But **restricting ourselves to Earth is not on the table.** Current debate on humanity's future vis-a-vis space does not regard such a policy, however noble, as a possibility.

Nevertheless, protection of the environment in space ranks high on the list of policies to be considered. 39 The importance of an environmentalist ethos in this context derives, in part, from the concerns we already deal with on Earth: the preservation of the natural environment for its own sake and for our communal survival, as well as the conservation of natural resources. Other environmental concerns particular to space exist also. Orbiting litter may soon seriously hinder our ability to maintain a global communications link. Waste disposal and resource maintenance techniques may determine whether the moon's limited water supply will be contaminated and the moon will remain a dead satellite. Environmental considerations are, and must be, a factor in any system of space law.

The **root causes** of Earth's environmental problems are limited resources, limited waste disposal sites, and limited living space. **Commercial development** of space **might be a**n effective **solution.** If minerals are extracted from dead asteroids floating through our solar system, perhaps there would be one less strip-mined rain forest. If solar energy is captured and beamed down to Earth's electric grid, that could be one less oil spill in our oceans. And if other worlds are colonized, then overpopulation can be allayed, possibly forever. But we are left with the question: "Which legal regime will best satisfy the needs of the terrestrial and extraterrestrial environments?"