## Framing

#### LINK FILTER – The affirmative does not stop the commercialization of space. Barring appropriation only limits the ownership of real property, use is still allowed. 100% of aff harms result from use, like the claiming of resources in space, not ownership of real estate.

#### *The aff doesn’t have a single piece of solvency or link evidence that is actually about appropriation, or even says the word appropriation, so you should give it ZERO WEIGHT. Go ahead, control F the doc.*

Švec et al 20 [Martin Švec, Petr Boháček, and Nikola Schmidt, “Utilization of Natural Resources in Outer Space: Social License to Operate as an Alternative Source of Both Legality and Legitimacy,” Oil Gas Energy Law J, 2020. <https://planetary-defense.eu/wp-content/uploads/2020/11/ov18-1-article17-notitle.pdf>] CT

2.2.1. Is the Utilization of Space Resources Implicitly Prohibited by the OST?

When the OST was drafted, exploitation of space resources was not considered feasible. Thus, the treaty does not contain any specific reference to space resource activities. However, silence of the OST does not necessarily imply unlawfulness of these activities. On the contrary, the freedom of exploration, use and access is one of the most fundamental principles of international space law. Art I of the OST reads: “Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.“25 It is worth mentioning that France already in 1966, during the negotiations of the OST, emphasised that it is important to know exactly what is meant by the term ‘use’, and whether it is an equivalent to the term ‘exploitation’. 26 While there is a general consensus on the interpretation of the term “exploration” as referring to discovery activities of the space environment for scientific reasons, a large disagreement exists concerning the term ‘use’.27 In this context the Board of Directors of the International Institute of Space Law (IISL) hold that there is no international agreement whether the right of “free use” includes the right to take and consume nonrenewable natural resources, including minerals and water on celestial bodies.28 The authors of this article are of the opinion that the term “use” seems to be broad enough to encompass the exploitation of natural resources. Pursuant to the Vienna Convention on the Law of Treaties, a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose. First, the term “use” usually refers to both the non-economic and economic utilization and, thus, the use of outer space for economic ends can include exploitation with the objective of making economic profit.29 Second, the OST’s preamble reveals that the treaty does not aim to restrict the use of outer space, but rather to promote free exploration and use of outer space and the opposite interpretation would lead to an unnecessary impediment to the development of the uses of outer space.30 What is more, these conclusions may also be derived from the Moon Agreement. Although this agreement has been ratified only by 18 states, it may help understand the meaning of the international space law principles enshrined in the OST. The preamble of the Moon Agreement refers to the “benefits which may be derived from the exploitation of the natural resources of the moon and other celestial bodies,” and art 11 envisages the establishment of an international regime to govern the exploitation of natural resources of the Moon. In addition, Hobe argues, that specific uses are only excluded if they are explicitly excluded in other provisions of the OST, such as prohibition of certain military activities.31

2.2.2. Does the Utilization of Space Resources Contradict the Principle of NonAppropriation?

The principle of non-appropriation is one of the most fundamental rules regulating the exploration and use of outer space. Art II of the OST reads as follows: “Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” As a consequence, outer space is generally understood as a res communis omnium, 32 in its legal characterisation similar to the law governing the high seas or the deep seabed. An analysis of these already existing regimes based on the non-appropriation principle reveals that an exploitation of natural resources is perfectly compatible with the principle of nonappropriation.33 Additionally, even the Moon Agreement suggests that the exploitation of the natural resources of the moon does not constitute a means of appropriation. In particular, art 11 of the Moon Agreement reiterates that outer space is not subject to national appropriation and it explicitly envisages the establishment of an international legal regime to govern the exploitation of space resources.34

#### The question of the resolution is not whether private activity in space is unjust, but rather GIVEN the reality of private use, whether private ownership of real estate in space ought to be allowed, or not. All of their advantages should be filtered by whether it proves that the private use of space without property rights is better than the use of space with property rights.

## CP

#### *CP: States ought to ban the appropriation of outer space by private entities except for natural persons, and states ought to recognize the right to property for natural persons in space.*

#### OR

#### *CP: the private appropriation of outer space by natural persons is just.*

#### The individual right to property is a basic human right that should be extended to space.

Faires 19 [Wes Faires, “The role of the Universal Declaration of Human Rights in supporting space property rights,” The Space Review, August 5, 2019. <https://www.thespacereview.com/article/3771/1>] CT

A long-discussed issue has been the absence of provisions pertaining to private entities under the 1967 Outer Space Treaty. Interpretations in favor of private property rights hold that the purpose of Article II’s ban on “national appropriation” was to place a limitation on member nations’ attempts to exercise territorial and political sovereignty over any part of outer space: to restrict territorial disputes between countries from extending beyond Earth. Without an explicit prohibition of private property rights in the treaty, their development with respect to private entities is unencumbered. Opposition has fluctuated from the position that the prohibition of national appropriation in Article II served to exclude development of property rights for private citizens: without a national entity with the ability to “confer” or pass down property rights to “sub-national” citizens, forward progress is rendered impossible. There were later attempts to classify private citizens as “nationals” in order to apply to them the prohibition of ‘national appropriation’. The 1979 Moon Agreement places an explicit ban on property for a host of entities, including “natural persons,” until such time as an international regime can be formulated. Two nations, the United States and Luxembourg, have enacted legislation favorable to property and mineral rights regarding space resources. This was met with opposition from some in the international community, who called into question whether such unilateral acts were in and of themselves a violation of the non-appropriation principle of the 1967 Outer Space Treaty. Perhaps in the future, the concept of “property rights” will have evolved beyond the terrestrial concepts of ownership, sovereignty, and territorial acquisition, under a new treaty framework structured by private entities, developed outside the auspices of any nation-state or supranational regime. Until such time, what is needed is a base-level favorable affirmation of private property rights in outer space, one that serves as a foundation for their evolution beyond national borders and which is accepted across the board. To this end, the solution to 50 years of ambiguity regarding private property rights under the under the current UN Outer Space Treaty framework is found within the 1948 Universal Declaration of Human Rights (UDHR), Article 17: (1) Everyone has the right to own property alone as well as in association with others. (2) No one shall be arbitrarily deprived of his property. -UN General Assembly. "Universal Declaration of Human Rights." United Nations, 217 (III) A,1948, Paris, Art. 17 The commercial space sector would welcome language favorable to private property rights in space, with specific emphasis on the re-affirmation of Article 17 as it pertains to property rights for private entities. Beyond Article 17, utilization of the UDHR as a default mechanism in situations where legislation is not yet developed can yield an immediate benefit for humanity. On the national level, the Universal Declaration of Human Rights can be seamlessly integrated into national space policy. Adoption of the UDHR into space policy by state parties to the Outer Space Treaty is essentially a reaffirmation of one of the fundamental principles of the United Nations, and can take place without litigation or implementation of new national legislation, and with no accusation of violation of “national appropriation.” In the international arena, the Universal Declaration of Human Rights can be seamlessly into to conducting legislative proceedings pertaining to outer space, given that: The overarching thematic priority for UNISPACE + 50 and beyond is “Sustainable Development in Space.” A critical aspect of this calls for ensuring the principles of the 2030 Agenda for Sustainable Development are upheld. The 2030 Agenda is grounded in, and re-affirms, the Universal Declaration of Human Rights (A/RES/70/1 para. 10, para. 19). The task at hand is to compel the United Nations Committee on Peaceful Uses of Outer Space (UNCOPUOS) to commit to upholding the Universal Declaration of Human Rights. Solidarity on such a core foundational UN principle as the UDHR solidifies reflection of Agenda 2030. I propose that UN Secretariat take this opportunity to move forward with Sustainable Development, and lead the way in incorporation the Universal Declaration of Human Rights into international space policy. It is time to recognize property rights as the universally declared human right that it is: “Everyone has the right to own property alone as well as in association with others.” The definition of property and scope of the UDHR was not limited to any one definition or territory. The UDHR was intended from the outset to be universal: “It is not a treaty; it is not an international agreement […] It is a Declaration of basic principles of human rights and freedoms, to be stamped with the approval of the General Assembly by formal vote of its members, and to serve as a common standard of achievement for all peoples of all nations.” -Eleanor Roosevelt, “On the Adoption of the Universal Declaration of Human Rights” December 9, 1948 Here in its 70th year of adoption, acceptance of the UDHR into space policy by the international community would be both timely and logical. It reaffirms adherence to a fundamental United Nations cornerstone, and provides an opportunity to strengthen the commitment to the 2030 Agenda for Sustainable Development. At a time when feasibility of extraction of minerals from celestial bodies is fast approaching, it is our responsibility to ensure that the transition occurs free of any terrestrial shackles. The Universal Declaration of Human Rights offers an acceptable foundational framework from which property rights can evolve off-planet, that can be embraced by the private sector, adopted across national levels, and upheld in the international arena

#### The CP protects individual property rights while solving case since the aff still applies to corporations.

#### No perms: The CP would expand the rights of individuals in space, from the mere right to use, to the full bundle of rights protected by private property.

Reinstein 99 ]Ezra J. Reinstein, “Owning Outer Space,” 20 Nw. J. Int'l L. & Bus. 59 (1999-2000). <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1500&context=njilb>] CT

IV. PROPOSAL: APPROPRJATIVE OWNERSHIP OF REAL PROPERTY

The ideal legal regime should create maximum incentives for efficient development of space, in recognition of the fact that the potential wealth in space will not drop into our laps. But as much as commercial development of space would benefit all mankind, it is just as important that the development be controlled. We must learn from mistakes of the past. Any legal regime should guard against inefficient exploitation, waste, and environmental despoliation. Furthermore, space should not become the next Wild West. Destruction and sabotage must be discouraged. My proposal, which will be developed throughout this essay, is to maximize incentives by giving developers comprehensive property rights. Humanity's welfare demands that we alter the current law to allow real estate ownership -- not just usufructary rights -- to those who would best develop land in space.7 The potential wealth of outer space, in the form of minerals, energy, living space, etc., doesn't do us any good unless we are able to harness it. And, as Jeffrey Kargel, a planetary scientist at the U.S. Geological Survey, has written, "if you want to cross the bridge into the 21st century of space [development], then space must pay its way and give private investors a handsome early return on investment.' 75 What do we mean by "ownership?" Property is commonly recognized as being a "bundle" of disparate rights regulating relations between people with respect to things. The bundle of rights can be unpacked. It includes: the right to possess, the right to use, the right to exclude, and the right to transfer.76 These rights are not on/off affairs; they can each be limited or expanded along a continuum. I use the term "ownership" to describe a state of affairs wherein a person has all four of these rights to their maximum extent with respect to a piece of property. Current space law ostensibly respects the right to use real property in space and to collect and own its fruits. Historically, this has been known as the usufructary right.77 But the current law doesn't even provide this right freely; it seems to be limited by several clauses of the Outer Space Treaty (e.g. use "for the benefit...of all countries").78 Nor does the OST recognize the right to exclude, as is evidenced by article I's prohibition on appropriating what it recognizes as being "the province of all mankind," the guarantee in the same article of "free access to all areas of celestial bodies," and article XII's requirement that "[a]ll stations [and] installations...shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity." Likewise, as illuminated in the SpaceCorp hypothetical, the prohibition on appropriation seems to negate a long-term right of possession. Without the right to exclude or pos- sess, of course, a legal system need not provide the right to transfer real estate. Anyone else may simply help themselves. In sum, the OST demands that "[n]o State can obtain such possessions as will entitle it to claim ownership or sovereignty over them... There can be no exclusive appro- priation of [celestial bodies] and any part thereof as a result of their 'use'..." 79 Under current law, space cannot be owned. A new law of space real property must enliven and support all four rights that comprise ownership. First, there must be a right to permanent possession: barring some ex- traordinary circumstance or the enforcement of a judgment, no one should face dispossession of his real estate on Earth or in space. This rule supplies a needed measure of certainty, in two ways: (1) it's a definite rule and almost any such rule is better than the fogginess of the current regime, and (2) it moves the presumption away from public conversion of private lands, and therefore makes it clear that the OST's statement, that space development must be "for the benefit...of all countries," is a moral exhortation and not a loophole through which the United Nations can dispossess a private party of his site. Second, I suggest that the right to use be unlimited, except by environmental regulations and the developer's domestic law. This rule is a recognition that humanity's fortune is best enhanced not by a centralized command-and-control system, but by private development making market-driven decisions. Like the right to perpetual possession, the third right -- the right to exclude -- creates the certainty vital to an optimal investment environment. As noted, the current system precludes such a right, for it would certainly run afoul of the prohibition on appropriation and the requirement that there be "free access to all areas of celestial bodies. 80 Without the right to exclude, however, pioneer investors would be at the mercy of free riders. After investing countless hours in (or paying someone else for) a survey of the real estate, after setting up a mining colony at great expense, the pioneer would have no recourse if another party took advantage of the pioneer's research and began a copycat mine on the very same site. So the right to exclude must form a part of the new legal system. Finally, the right to transfer must accompany the rights of exclusion and perpetual possession. The Coase Theorem of economics tells us that, in a legal environment supportive of bargaining, property rights will be allocated to the party who values them most, i.e. the most efficient user of the property.81 When transaction costs are high enough to prevent bargaining, property rights only end up in the most productively efficient hands if the law happens to initially assign them that way.82 Without any right to transfer, transaction costs are infinite, and no bargaining can occur. In order to avoid the inevitably inefficient solutions of a command-and-control regime of property usage, the right to transfer -- alienability -- must be a part of our system.83 All these rights together -- possession, use, exclusion, and transfer -- make up ownership. And it is ownership that the modem law of space real property needs.

## Net Benefit

#### Space settlement is coming now and prevents inevitable extinction. Future settlers need protections and the rule of law.

Gesl 18 [Paul M. Gesl (Maj, USAF JD), “PREPARING FOR THE NEXT SPACE RACE: Legislation and Policy Recommendations for Space Colonies,” A Research Report Submitted to the Faculty In Partial Fulfillment of the Graduation Requirements for the Degree of MASTER OF OPERATIONAL ARTS AND SCIENCES (April 2018). <https://apps.dtic.mil/sti/pdfs/AD1053024.pdf>] CT

Why the United States Needs to Think About Space Colonization Now

The United States’ space policies under the previous two Presidential administrations have not matched the ambition of the commercial sector. The author has criticized the National Space Policies of both President Obama and George W. Bush as being too “Earth-Centric.”6 Based on the current state of technologies, it is easy to dismiss space colonization as, at best, a problem to worry about tomorrow and, at worst, mere science fiction. This is irresponsible. Reaching space is difficult. Colonizing it will be even more difficult; however, we cannot overlook it as a likely possibility. NASA viewed space colonization as an endeavor within humanity’s reach in the 1970s.7 Now it is beginning to take shape as a reality. In 2015 at the Pioneering Space National Summit, policy makers, industry leaders and advocates agreed that “The long term goal of the human spaceflight and exploration program of the United States is to expand permanent human presence beyond low-Earth orbit in a way that will enable human settlement and a thriving space economy. This will be best achieved through public-private partnerships and international collaboration (emphasis in original).”8 Additionally, there have been several attempts in Congress to pursue space settlement.9 Private industry appears to be taking the lead in this race. Elon Musk, the CEO of SpaceX intends to establish a colony of a million settlers on the surface of Mars.10 SpaceX is targeting the first manned missions to make this a reality to launch in 2024.11 Mr. Musk envisions the full colonization to take 40-100 years.12 Even if this timeline misses its ambitious deadline by a decade, humanity will be a multi-planetary species in many readers’ lifetimes. It is important to note that Mr. Musk recently stated that SpaceX is “building the first Mars, or interplanetary ship, and I think we’ll be able to do short trips, flights by first half of next year.”13 Even though he joked that the company might miss their timeline, his comments highlight that colonization is an issue that is fast approaching.14 Another factor to consider is that a legal framework needs to be developed before a Martian colony is at its full capacity. Mr. Musk envisions using SpaceX’s BFR to send approximately 100 people per flight to Mars.15 Additionally, SpaceX appears to be planning for humans living on the lunar surface in their Moon Base Alpha.16 SpaceX is not alone in their ambitions. United Launch Alliance (ULA) published their plans to expand the population of humans living and working in space. Their Cis-lunar 1,000 framework is a 30-year plan to develop the cis-lunar economy and grow the population of humans living and working in space from six to 1,000.17 Space colonization is more important to our species than the economic benefits of a space economy and the conquests of exploration. The current world population is 7.4 billion people.18 According to the World Wildlife Foundation and the Global Footprint Network, “the equivalent of 1.7 planets would be needed to produce enough natural resources to match our consumption rates and a growing population.”19 The problem will likely grow worse as the population of the planet continues to grow. According to the United Nations, the Earth’s population will grow to over 11 billion people by 2100.20 Based partially on this, “Prof [Stephen] Hawking said it was only a matter of time before the Earth as we know it is destroyed by an asteroid strike, soaring temperatures or over-population.”21 Hawking further stated that, “When we have reached similar crisis in or (sic.) history there has usually been somewhere else to colonise (sic.). Columbus did it in 1492 when he discovered the new world. But now there is no new world. No Eutopia (sic.) around the corner. We are running out of space and the only places to go are other worlds.”22 The late Professor Hawking is not alone in his view, the National Space Society observed the benefits of expanding into space. “Outer space holds virtually limitless amounts of energy and raw materials, which can be harvested for use both on Earth and in space. Quality of life can be improved directly by utilization of these resources and also indirectly moving hazardous and polluting industries and/or their waste products off planet Earth.”23 These are just several of the many compelling reasons to colonize space advocated by groups such as the National Space Society and the Space Frontier Foundation.24 ULA appears to be taking steps to meet their ambitions for the future. ULA announced the first step towards making their Cis-lunar 1,000 vision a reality. In October 2017, they announced a partnership with Bigelow Aerospace to launch a habitat to low lunar orbit.25 The launch is expected to be completed before the end 2022.26 Some feel that colonization is going to happen, no matter what governments do.27 If colonization is going to happen, then it is in the United States’ best interest to develop a legal framework that supports the efforts and protects our citizens who will travel to and live in these habitats. This is important for several reasons. First, private corporations appear to have an interest in colonizing space, so it is in humanity’s future whether the government is involved nor not. However, governments can take actions that will accelerate things.28 Second, it is in the best interest of the United States’ economy to support commercial companies that are expanding into space. Third, if the United States does not create a favorable legal framework for space colonization, someone else will. Finally, as humanity expands away from the surface of the Earth, it is important to create a free society based on the principles of the Rule of Law rather than some other form of government, or an anarchistic company town.

#### Space settlement with private appropriation is better than settlement without appropriation.

### 1 Tyranny

#### Absent legally enforced personal rights, like property, space settlements are likely to be dominated by tyrannical governments or corporations. Turns case.

Cockell 08 [Charles S. Cockell (Center for Earth, Planetary, Space and Astronomical Research – Open University, Milton Keynes), “AN ESSAY ON EXTRATERRESTRIAL LIBERTY,” JBIS, VOL. 61, pp. 255-275, 2008. <https://www.researchgate.net/profile/Charles-Cockell/publication/258317782_An_Essay_on_Extraterrestrial_Liberty/links/0c96053053a02cfb24000000/An-Essay-on-Extraterrestrial-Liberty.pdf>] CT

6. EXTRATERRESTRIAL LIBERTY

For Berlin [20], ‘negative’ liberty meant the pursuit of individual liberty by removing those mechanisms that exert control over one’s actions. Western liberal democracies pursue, for the most part, philosophies of negative liberty, by attempting to reduce the role of government in individual lives. A restricted sphere of negative liberty is created by tyrannies, in which encroachment into the lives of individuals reduces the number and scope of activities in which people consider themselves free, or at least able to make decisions that can be implemented independently of the State. Of course, by retreating into a core set of activities in which one is completely free, one is in the process of relinquishing liberty, as the scope of free actions is voluntarily reduced. This is in itself a form of slavery. Societies where the scope of negative liberty is reduced can be described as more enslaved, even if the people there may not describe themselves as such, because they have in fact escaped State slavery by retreating from those very activities in which control is exerted.

The crucial point is that the sphere within which negative liberty is possible is necessarily constrained by the environmental conditions under which one exists. The more extreme the environmental conditions, the fewer social activities can occur without collective oversight. More saliently, the people themselves may actually request such oversight, to protect their safety from others who would abuse it, with the resulting dangers. Some of these systems of monitoring can be found in societies on Earth. We cannot drive automobiles without safety checks. Our water must be passed through treatment works— life support systems if you will—that ensure that what we are drinking is safe. Indeed, even in some of the most mature terrestrial democracies, a remarkable quantity of basic consumables and resources come to us through systems of compliance overseen by the State. This is a form of control that most people accept because we consider it in our interest. We do not usually see such invasions of our liberty as tyranny, but rather as benevolent actions by the State to ensure our safekeeping. But they are incursions nevertheless, and while democracy is functioning such oversights need not necessarily concern us; or at least they do not worry most of the public, who are more concerned with having fresh water than more abstract thoughts about the allowable extent to which the State should have influence over their water quality.

In extraterrestrial environments, spacesuits, water quality, food production, habitat pressurisation and so on and so forth will be subject to regulation by corporations or the State. As on Earth, perhaps many of these incursions will be regarded as acts of beneficence by the State in the interests of safety, and will be willingly accepted. But one fact is undeniable: the extent of negative liberty must be less in extraterrestrial environments than on Earth, and quite significantly less. Even the air will be subject to quality controls and checks. Forms and permissions will be associated with the very act of breathing. No philosophy of advancing the domain of negative liberty, no clever sophistry, can change this truth, which is brought into being by basic survival needs.

An undeniable effect will be to expand the opportunities for tyranny. Where the mechanisms for central control are necessarily enlarged in their scope and diversity, a greater number of levers exist, and enable individuals and organisations to exert control and assume power. A reduction in negative liberty does not necessarily imply greater tyranny, but it certainly makes it possible. In extraterrestrial environments, where centralised interventions must be frequent, how much weaker is freedom and how much easier is tyranny to enforce? We cannot know the answers until we undertake the experiment, but we can be fairly sure that the qualitative answer must be ‘more easily’.

More insidiously, the restriction of the borders of negative liberty, caused by the apparent need to protect individuals from the irresponsible actions of others, can itself be perpetuated as a form of liberty. The use of alcohol in extraterrestrial environments is one example. On Earth, the excessive use of alcohol may result in broken windows and arrests, but once the windows are repaired little damage has been done to society as a whole. Hence, although there is a negative social collective impact of excessive alcohol use, the prohibition of alcohol consumption of any kind is generally regarded as an infringement of civil liberties that the public will not tolerate. This is why, of course, attempts to do exactly this in the past have been met by black marketeering. But in extraterrestrial environments, a broken window may imply depressurisation, and the instant death of many individuals. The potential impact on society of the irresponsible and thoughtless actions of individuals is greater, and it might seem justifiable to restrict greatly, or even prohibit, the civil liberty of alcohol use, in the interests of collective safety.

This principle can be applied to many diverse social interactions that could be construed as threatening people, and the prevention of which can be advanced as the protection of individual and social freedom through the process of restricting negative liberty.

Liberty encompasses the freedom that individuals have to actively pursue their own objectives (‘positive liberty’ sensu Berlin). An obvious mechanism by which this becomes practical is the creation of social mechanisms and institutions through which the ‘active’ pursuit of this ‘positive’ sense of liberty is made possible, for example the welfare State. Organisations established to act as conduits for the free expression of different points of view, or to act as means to achieve practical objectives, are not always liberal. Even in some of the most developed democracies, societies and organisations may become dominated by elite closed circles of people, and media channels may be influenced by moguls who use outlets to perpetuate specific corporate views. What prevents these incursions into the structures of liberty from descending into wholesale tyranny? In reality, very little. The subversion of democratic States, or States on the verge of democracy, into societies more reminiscent of dictatorships has many historical precedents. The principal mechanisms that allow individual freedom to triumph over the slide towards tyranny include the legally agreed freedoms that individuals have to establish competition against dominating organisations, and the culture that ensures that the freedom to create organisations is not then abused to destroy the very democratic organisations that guarantee that freedom.

In a society in which the freedom to organise and assemble institutions is protected by law, those organisations that distort and alter their environments, or the information they propagate, are likely to be usurped by institutions that reflect a different style of thinking, by the process of individual choice. However, these alternative visions can only be effective, and one can only assert them over the prevailing opinions with confidence, when one has sufficient information to be confident of their likely veracity. On Earth, to express many ideas and counter-opinions one does not need supreme confidence in the truth. If one’s opinion turns out to be in error one gives up, accepts the viewpoint of the adversary and continues one’s life. These opportunities to challenge, however, are central to the power of the individual to confront institutions.

But there is one social situation in which the individual’s power is markedly reduced, even rendered completely ineffective against a collective body. Health and safety is one of the most effective levers of social influence and justified coercion, because it invokes the protection of people confronted with life and death situations. Consider, for example, an oxygen supply system on the Moon. The authority that runs such a system might seek control over a political dissenter by threatening to move him or her and their family to a new zone of habitation, on the grounds that the oxygen supply to their habitat is faulty. By doing this, they will remind these individuals who is in control of their survival, and coerce them through fear into mitigating their dissent, thereby creating a more malleable individual and reducing the challenge to collective authority.

Governing organisations have access to a vast realm of information that no single individual can hope to have [21]. They know, for example, about the oxygen demand, its rate of supply, the pipes that supply it, the maintenance history of the oxygen producing machines, and so on and so forth. For an individual to declare that the intention of the authority to move them to another habitat is for controlling political purposes, he or she must also have access to all such information, which they can then use to demonstrate that there is no safety concern. If they do not have access to this information, then it becomes a simple task for the authorities to portray them as dishonourable individuals inveighing against the hard work of other individuals who are working to secure their individual safety and the security of society [22]. They can be then be ostracised, and their general behaviour will be treated as disingenuous. However, to have access to all the information to convincingly uphold a complaint is never possible, because an individual can never know whether they are missing a single crucial fact that makes all the difference to their safety. Even armed with what they perceive to be all the information available, the individual is faced with a choice between allowing an incursion on their home and liberty, or taking the risk that their presumption of having full information is correct. Faced with such a choice, the individual is likely to opt for the former in the interests of caution, particularly in an environment where the other choice may imply death from a failed oxygen system. In the extreme case, this first course of action would be further reinforced in a particularly coercive, venal society where the individual might even be convinced of the capability of the authorities to engineer the failure of their oxygen system and their death, in order to crush dissent, even if their complaint was in fact justified.

The end point of this process, when applied across many activities in life, is a colony of automatons performing tasks for an extraterrestrial authority, with their freedom reduced to a withered core of activities in the most private confines of their habitats. Extraterrestrial environments make such an endpoint not merely a possible outcome, but a likely one.

This attack on liberty is made possible because the pursuit of individual safety can be made an unchallengeable requirement of a ‘free’ society [23]. Freedom from instantaneous death caused by the external environment is the common freedom on which all individuals should converge, and any social structure or plan that brings people closer to that reality must surely be praiseworthy? The removal of other freedoms to achieve the safety of society is excusable. From this position, the environment can itself become the instrument of positive liberty. In this way, and in a rather unique way, encroachment on freedom of thought and movement, in the interests of ensuring the protection of the freedom of the individual against the lethality of the environment, can be transformed into a justifiable and universalisable doctrine of control [24].

Unfortunately this approach receives succour from every major tradition of social philosophy that we know on Earth. From Grotius to J.S. Mill, the right to self-preservation has been considered the core of individual liberties [25], a point beyond which no State may go, and which every individual has the right to take it upon him or herself to secure—indeed, such a notion has even been referred to as a ‘natural law’ [26]. Even Hobbes’ view of the necessity of sovereign control [27] turns on the right of each individual in a fight to preserve themselves. It is possible to spend much of one’s life on Earth without undue concern for self-preservation. Apart from those unfortunate individuals who confront a burglar or gang, most people will not actually come face to face with the need to infringe others’ rights to self-preservation. Fortunately, although the right to self-preservation is theoretically an unchallengeable right of all people, it remains, in a civil society, one sufficiently protected by the laws, and by regulations against various street crimes that might infringe self-preservation.

If, as has been traditional on the Earth, the right to selfpreservation is also held to be a basic right of all people in extraterrestrial environments, then the keys to despotism are handed over to those in control of society. Self-preservation is threatened on a day-to-day basis by the lethality of the environment. In such an environment, each individual does indeed represent a much greater threat to every other individual than on the Earth, because unpredictable and criminal actions against the infrastructure represent a continuously present and potentially catastrophic threat to self-preservation. The authorities therefore have the excuse to implement draconian systems of control to protect the right of every individual to self-preservation. Worse than this, however, the people will voluntarily, in exercising their right to selfpreservation, and to protect themselves, accept more farreaching control over the lives of others [28]. Where death is a more likely outcome of criminal action, the Hobbesian State of nature, and the tendency to vigorously guard against it, becomes a more tangible reality [29].

#### A lack of property rights enables tyranny in space by creating a monopoly on power and stifling individual expression.

Cockell 10 [Charles S. Cockell (Center for Earth, Planetary, Space and Astronomical Research – Open University, Milton Keynes), “Essay on the Causes and Consequences of Extraterrestrial Tyranny,” Journal of the British Interplanetary Society, Vol.63, pp. 15-37, January 2010. <https://www.researchgate.net/profile/Charles-Cockell/publication/258402359_Essay_on_the_Causes_and_Consequences_of_Extraterrestrial_Tyranny/links/00b495305364b3f6e8000000/Essay-on-the-Causes-and-Consequences-of-Extraterrestrial-Tyranny.pdf>] CT

Perhaps the most important economic argument is that a centrally-planned system of production is likely to become autarkic, bearing in mind the political problems outlined earlier. In principle, there is no reason why a centrally-planned system of manufacture should not trade its products with other entities, but in reality if there is no profit motive for the organisation to do so, it will not achieve the same level of inducement to put the effort into overcoming the difficult obstacles of interplanetary trade if it is only charged with fabricating enough of a product to satisfy domestic demand. The problem of autarky is just one of the many problems associated with the system, which ultimately lends itself to political tyranny.

The centrally-planned economy is unlikely, despite best efforts, to truly produce what people want and, like centrallyplanned states on the Earth, it cannot predict fashions and desires in the future that will necessarily make its economic output limited and dull compared to private entities, which are constantly striving to try to sell consumers new items. The worst effect of the strictly controlled economy will be the stifling of individual creativity, the opportunity to combine to produce, and the emergence of the political culture that results from the need to generate all the functionaries and state officials, with their attendant powers, that will be required to do the planning in the first place.

The logic of a centrally-planned economy, and the attraction of this in the face of the possible failure of entities producing things so basic as oxygen, should be resisted even though it may lead to a less ordered and structured economic network [53]. The role of the state in this schemata should be to ensure that sufficient entities exist (and more so for redundancy) to produce what is needed and to encourage a vigorous growth in these industries. It should only intervene to exert wholesale control over the means of production when a failure in some entity, or entities, threatens lives.

Rejecting a centrally-planned economy would imply competing means of production, which itself almost certainly implies the presence of a system of private property. The public ownership of all goods might appear superficially to be a security against the possibility of people going short of vital goods. In the early stages of the establishment of settlements, it might well be the case that public ownership of certain commodities such as water and some food provisions will be required to ensure that they are distributed fairly to all occupants. However, for all the reasons just adumbrated, some incentive for production must exist independently of the people running the settlement. Quite apart from this, the problem in a highly isolated group is that complete control of all property by a single authority opens the door to political tyranny.

An attraction of a Marxian society might be the economic equality that would result from the previously discussed mechanisms. Central planning, in particular, would obviate the chances of single, private entities accumulating a vast proportion of the wealth and individuals associated with these organisations becoming their own economic tyrants. There is merit in this view, and achieving equality would certainly prevent this outcome. Yet, regulations on monopolies and other tax mechanisms could be used to some degree to prevent excessive and despotic accumulations of wealth.

Aside from the most severe cases, there are rational motives for allowing inequality. The environment of outer space is lethal, difficult to work in and a costly place in which to establish enterprises. To rely on the establishment of large networks of human settlements throughout the Solar System, solely on the back of state enterprise and centrally-directed orders, is likely to be folly. There is good reason to question what motives privately-funded people, let alone state organisations, would have for exploring the far reaches of space anyway. So, every incentive must be found to drive groups to establish enterprises for resources, tourism or whatever else is deemed necessary in order to expand.

A Marxian system of equality in outer space, even if this could be achieved through some type of agreed social order, will erode the incentive to establish new enterprises from which trade can flow. Arguments that the driven will explore and settle space to expand the reach of humanity, to make it a multiplanet species and to advance science, independent of any economic incentive, are likely to be as ineffective as they were in stimulating productivity in the communist states of the Earth. People are motivated by these laudable and altruistic arguments, but the impulsion to work to secure the common good is not common and it is probably not sufficiently universal to be sure of achieving the results required in outer space.

The sense of community, which is perceived to be another golden egg of the Marxian vision, depends of course on what sense of community we are talking about. As I have elaborated elsewhere, the sense of community in a centrally-organised society driven to complete equality is likely - and very rapidly in the environment of outer space - to turn into a highly autarchic control structure in which there is certainly an evident community, but where the freedom of the individual is all but destroyed [54]. The society of contented slaves is most likely to emerge in an environment where continuously lethal external conditions give every excuse for control structures to expand into lives with ever more vigour by the process of the tendency of humans to expand their power bases.

The maturation of tyranny will be facilitated because the Marxian vision is a single doctrine vision. How exactly this vision will manifest in the environment of space is unpredictable, but any single doctrine society that seeks to protect centrally planned objectives can never tolerate dissenters. It has been recognised for a long time that it is in the nature of singledoctrine societies to remove countervailing views, either through political dictates, peer pressure or the generation of terror and it follows that, eo ipso, few lesser arguments need be entertained against the Marxian vision of an extraterrestrial society. The ease with which the deadly environment can be turned into the common enemy and used to justify the protection and advancement of a single and inflexible political and economic vision makes any social order that promulgates one — and only one — path to social success dangerous. The details of those parts of a Marxian plan that can succeed and those that cannot, therefore, whither into insignificance in the face of the need to encourage a plurality of ideas about how extraterrestrial society should be ordered.

#### State control of space property undermines liberty. Denying ownership in the name of preserving the common heritage of humankind is a form of tyranny.

Cockell 09 [Charles S. Cockell (Center for Earth, Planetary, Space and Astronomical Research – Open University, Milton Keynes), ““LIBERTY AND THE LIMITS TO THE EXTRATERRESTRIAL STATE”,” JBIS, VOL. 62, pp. 139-157, 2009. https://www.researchgate.net/profile/Charles-Cockell/publication/259104003\_Liberty\_and\_the\_Limits\_to\_the\_Extraterrestrial\_State/links/0f3175305397610c17000000/Liberty-and-the-Limits-to-the-Extraterrestrial-State.pdf] CT

8. PRIVATE LAND AND PROPERTY

The acquisition of private property and land becomes a threat much more real to others who lack that property in an environment where the conditions are lethal. However, the usurpation of property and land by the state can no more be tolerated in an extraterrestrial environment than on the Earth if the conditions for liberty are to be nurtured. Thus a paradox faces the extraterrestrial state which revolves around the question of when it is legitimate to seize property in the interests of livelihood and when it is not [42].

It is worth stating again the famous words of William Pitt, ‘necessity is the plea for every infringement of human freedom’ [43]. The simple answer to problem of property is that it should rarely be right for the state to expropriate property since it must set itself the prior objective of resolving any situation that threatens the lives of people before it resorts to seizing property [44].

One cannot imagine war in space, at least in the foreseeable future, although the long-term future may hold a different story. The most common excuse for the expropriation of private property is therefore absent and the only situation in which such extremes can be envisaged is when a body of people are threatened with death in the extraterrestrial environment and no recourse other than the acquisition of others’ property can resolve the situation. An imaginary debacle involving a failed oxygen supply system in which segments of oxygen systems, owned privately by others, must be commandeered to avert an impending disaster in another segment of habitats, might be envisaged. But as with the systematic state claim to private property on the Earth, such situations must be overseen by deep political discussion and misgiving.

The lethal conditions in space do not prevent corporations and other suppliers of commodities from selling their wares to individuals in a traditional type of transaction whereby the property is then within the private domain of the buyer; and a great deal of suspicion and analysis should attend the excuse that the lethal conditions require public ownership of this and that commodity. In situations where early public ownership of resources seems likely, such as food production systems, the state, and the people, must seize upon all means possible to expand the rate of production and accessibility of the resource so that corporate or private ownership and competition becomes possible. Thus, the same principle that applies to the oxygen industry discussed earlier underpins the very notions of private property in space.

We cannot apply exactly the same view to land, where some type of public ownership may be desirable in certain spaces [45], but apart from these rare preserves, land could be available for private transaction both so that private industries can acquire natural resources and use them to better the economic field of play of the extraterrestrial settlements; and so that individuals can themselves seek space and resources independently of others. The transactions by which this land is traded may be by the same regulations as in many nations on the Earth: sold and bought by developers at prices that appeal to those who believe that they can do something useful with the land.

A more obvious question pertains to land that is not already under ownership – how is extraterrestrial land to be claimed in the first place? This is a matter that has occupied a great many people, and despite all the complexities and arguments about planetary protection, UN legalities and so on and so forth, a simple Lockean response to this question [46] seems the most practical way to deal with the problem – any person or individual who can find a use for land and do something productive with it should be able to claim it. Only this policy will maximise the chances that individuals and corporations will risk themselves in the lethal conditions of space to create enterprises beneficially using the land and expanding the human presence in space. The legal condition would be that these people must do something productive with the land, rather than merely claim it in absentia, hence preventing vast tracts of land sitting unused, but claimed by absentee landlords waving pieces of paper with descriptions of their landholdings, a problem that has already manifested itself in the public sale of land throughout the Solar System as gift items.

In this scheme of land the role of the state would be to collate claims on land and verify that productive activity is occurring on it, and to arbitrate and set the general laws that would apply to all subsequent transactions of land, which might be accomplished by estate agents or realtors no differently to the processes that occur on the Earth. On Earth today, this vision of extraterrestrial land is rejected by some people, but the reason seems to be a product of envy – a distaste that land will be claimed by rich corporations or nations that have the spacefaring capacity and denied to those that do not. But what is the point of denying land to those who could do something useful with it to placate those who would prefer to see nothing done with it at all, simply to satisfy their desire to level the whole of humanity to the lowest economic denominator? Land in outer space, barring that of potential biological interest and placed within the remit of planetary protection concerns, and accepting some minor regulations regarding pollution and waste in all other lands, should be free for any person or group to exploit and develop. The control of land by international or national regulations to hinder its free use – and the restriction in its use under the spurious claim that it is the common heritage of all humankind – is a form of tyranny [47]. There is no meaningful argument that can sustain the claim that land is the province or heritage of all humankind. Indeed, from a general point of view there seems to be considerably more greed and hubris bound up in the idea that everything in the Universe belongs to humankind compared with the claim that a few patches of land here and there, an infinitesimally small percentage of the material Universe, should be able to be claimed by corporations or individuals from planet Earth who can find something useful to do with it.