# Harvard RR Semis

## 1NC – DA

#### The plan requires clarifying international space law---causes strategic bargaining to extract concessions

Alexander William Salter 16, Assistant Professor of Economics, Rawls College of Business, Texas Tech University, "SPACE DEBRIS: A LAW AND ECONOMICS ANALYSIS OF THE ORBITAL COMMONS", 19 STAN. TECH. L. REV. 221 (2016), https://law.stanford.edu/wp-content/uploads/2017/11/19-2-2-salter-final\_0.pdf

V. MITIGATION VS. REMOVAL

Relying on international law to create an environment conducive to space debris removal initially seems promising. The Virginia school of political economy has convincingly shown the importance of political-legal institutions in creating the incentives that determine whether those who act within those institutions behave cooperatively or predatorily.47 In the context of space debris, the role of nation-states, or their space agencies, would be to create an international legal framework that clearly specifies the rules that will govern space debris removal and the interactions in space more generally. The certainty afforded by clear and nondiscriminatory48 rules would enable the parties of the space debris “social contract” to use efficient strategies for coping with space debris. However, this ideal result is, in practice, far from certain. To borrow a concept from Buchanan and Tullock’s framework,49 the costs of amending the rules in the case of international space law are exceptionally high. Although a social contract is beneficial in that it prevents stronger nation-states from imposing their will on weaker nation-states, it also creates incentives for the main spacefaring nations to block reforms that are overall welfare-enhancing but that do not sufficiently or directly benefit the stronger nations.

The 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (more commonly known as the Outer Space Treaty) is the foundation for current international space law.50 All major spacefaring nations are signatories. Article VIII of this treaty is the largest legal barrier to space debris removal efforts. This article stipulates that parties to the treaty retain jurisdiction over objects they launch into space, whether in orbit or on a celestial body such as the Moon. This article means that American organizations, whether private firms or the government, cannot remove pieces of Chinese or Russian debris without the permission of their respective governments. Perhaps contrary to intuition, consent will probably not be easy to secure.

A major difficulty lies in the realization that much debris is valuable scrap material that is already in orbit. A significant fraction of the costs associated with putting spacecraft in orbit comes from escaping Earth’s gravity well. The presence of valuable material already in space can justifiably be claimed as a valuable resource for repairs to current spacecraft and eventual manufacturing in space. As an example, approximately 1,000 tons of aluminum orbit as debris from the upper stages of launch vehicles alone. Launching those materials into orbit could cost between $5 billion and $10 billion and would take several years.51 Another difficulty lies in the fact that no definition of space debris is currently accepted internationally. This could prove problematic for removal efforts, if there is disagreement as to whether a given object is useless space junk, or a potentially useful space asset. Although this ambiguity may appear purely semantic, resolving it does pose some legal difficulties. Doing so would require consensus among the spacefaring nations. The negotiation process for obtaining consent would be costly.

Less obvious, but still important, is the 1972 Convention on International Liability for Damage Caused by Space Objects, normally referred to as the Liability Convention. The Liability Convention expanded on the issue of liability in Article VII of the Outer Space Treaty. Under the Liability Convention, any government “shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft, and liable for damage due to its faults in space.”52 In other words, if a US party attempts to remove debris and accidentally damages another nation’s space objects, the US government would be liable for damages. More generally, because launching states would bear costs associated with accidents during debris removal, those states may be unwilling to participate in or permit such efforts. In theory, insurance can partly remediate the costs, but that remediation would still make debris removal engagement less appealing.

A global effort to remediate debris would, by necessity, involve the three major spacefaring nations: the United States, Russia, and China.53 However, any effort would also require—at a minimum—a significant clarification and—at most —a complete overhaul of existing space law.54 One cannot assume that parties to the necessary political bargains would limit parleying to space-related issues. Agreements between sovereign nation-states must be self-enforcing.55 To secure consent, various parties to the change in the international legal-institutional framework may bargain strategically and may hold out for unrelated concessions as a way of maximizing private surplus. The costs, especially the decision-making costs, of changing the legal framework to secure a global response to a global commons problem are potentially quite high.

#### Russia uses negotiations to push the PPWT---erodes US space dominance---unilat solves

Michael Listner 18, JD, Regent University School of Law, the founder and principal of the legal and policy think-tank/consultation firm Space Law and Policy Solutions, Sept 17 2018, "The art of lawfare and the real war in outer space", The Space Review, www.thespacereview.com/article/3571/1

A battle for primacy in outer space took place on August 14, 2018, among the Russian Federation, the United States, and, indirectly, the People’s Republic of China. This battle did not involve the exotic technology of science fiction, antisatellite weapons (ASATs), or the incapacitation of satellites; it was not part of a hot war and did not even occur in outer space. Rather, it took place in the halls of the Conference of Disarmament in Geneva, Switzerland, and concerned the interdiction of the hypothetical deployment of instrumentalities of a hot war in outer space. The carefully orchestrated arena for this battle by the proponents of banning so-called space weapons involved methodologies, institutions, and agents of international law but was undermined by a vigorous counterattack by the United States using the same forum and suite of instruments so skillfully levied against it.1 This battle, of course, is not a single instance but the latest skirmish of a much larger conflict involving real war in space.

There’s been significant attention—and overstatem­ent— about the effect of a proposed Space Force by the United States, including an arms race and dominance as articulated by the United States,2 yet little attention has been given to the contest that continues to be fought over outer space using the tools of international law and policy, both of which are instruments of “lawfare.” Maj. General Charles N. Dunlap, Jr. (retired)3 first defined lawfare in the paper “Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts,” as “a method of warfare where law is used as a means of realizing a military objective.”4 This definition can be expanded to the use of hard law, soft law, and non-governmental organizations and institutions within the international arena to achieve a national objective and geopolitical end that would otherwise require the use of hard power. As observed by General Dunlap, lawfare imputes the teachings of Sun Tzu in particular this teaching: “The supreme art of war is to subdue the enemy without fighting.”5

Lawfare is not a new concept and has been used in many domains, but the tools brought to bear have become more prolific, and the domain of outer space has been and continues to be a theater where it is applied. The earliest example of lawfare (even though the term was not yet coined) in outer space occurred pre-Sputnik with Soviet Union attempting to use customary law to make claims of sovereignty extending beyond the atmosphere to the space above its territory. This claim was preempted by the launch of Sputnik 1 and the act of the satellite flying over the territory of other nations.6 The Eisenhower Administration saw this as an opportunity to meet a national space policy goal and likewise used customary law as an implement of lawfare and successfully created the principle of free access to outer space, which it utilized for photoreconnaissance activities in lieu of overflights of another nation’s sovereign airspace.7 The Soviet Union unsuccessfully attempted to defeat this move using lawfare in the United Nations through a proposal that would have prohibited the use of outer space for the purpose of intelligence gathering.8

Since that setback, the art of lawfare in outer space has settled on the objective ascribed to another teaching of Sun Tzu:

“With regard to precipitous heights, if you proceed your adversary, occupy the raised and sunny spots, and there wait for him to come up. Remember, if the enemy has occupied precipitous heights before you, do not follow him, but retreat and try to entice him away.”9

The second part of this teaching exemplifies the role of lawfare in the present war in outer space: to employ the tools and institutions of international law as a means to legally corner an adversary and gain geopolitical advantage in soft power, with the aim of slowing and eroding the advantage that adversary has attained through preeminence in the domain of outer space, and replace it with their own. This objective is accomplished by two general means: legally-binding measures, most commonly in the form of treaties, and so-called non-binding measures couched as sustainability.

Lawfare in space continued in the intervening years between Sputnik-1 and the signature and ratification of the Outer Space Treaty and afterward. The weapon of choice: disarmament proposals for outer space. Provisions for banning so-called space weapons in the Outer Space Treaty were rejected by the Soviet Union in favor of separate arms control measures.10 These measures included proposals, some of which related to the proscription of ASATs, designed to not only gain an advantage in outer space but to gauge political intent and resolve.11

The lawfare offensive escalated after the proposed Strategic Defense Initiative with an effort curtail space-based missile defense technology through a ban on so-called space weapons and a proverbial arms race in outer space. The Prevention of an Arms Race in Outer Space (PAROS), introduced in 1985, continues to seek a legally binding measure to place any weapon in outer space, including those designed for self-defense. It spawned measures such as the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT), co-sponsored by Russia and China. This and other measures have met resistance as unverifiable and certainly are not likely to gain the advice and consent of the US Senate for ratification. The end game of the use of lawfare in the form of efforts like PAROS—the latest attempt at which was defeated in Geneva—is to propose legally binding measures that proponents would ignore to their advantage in any event. The sponsors and advocates of these hard-law measures recognize they will not come to fruition but, in the process of promoting them, will enhance their soft power and moral authority, which can be applied to entice their adversary down.

Non-binding resolutions and measures in the form of political agreements and guidelines are being used concurrently in the lawfare engagement in outer space, where proposals for legally binding measures alone fall short of the goal of creating hard law and challenging dominance in outer space. These resolutions and measures, which emphasize sustainability, are designed to perform an end run around the formalities of a treaty to entice agreement on issues that would otherwise be unacceptable in a hard-law agreement. These measures have the dual effect to create soft-power support on the one hand and hard law on the other. This tool of lawfare, which uses clichés of cooperation and sustainability, is a ploy that applies the ambiguous nature of customary international law to achieve what cannot be done through treaties: to “entice the adversary away” and create legal and political constraints to bind and degrade its use of outer space or prevent it from maintaining its superiority, all the while allowing others to play catchup and replace one form of dominance with another. While lawfare is by nature asymmetric, this indirect approach could be considered a subset an irregular tactic of lawfare, as opposed to the use of formal treaties in lawfare.

The crux is that, like space objects used in outer space, international law and its implements are dual-use in that they can be used for proactive ends or weaponized, with those using the appliances of lawfare to encourage cession of the high ground choosing the latter rather than the former. The decision to weaponize international law and its institutions to prosecute this war in space brings into question the efficacy of new rules or norms. Indeed, the idea of expanding the jurisprudence of outer space through custom, as being suggested by the United States, and more recently gap-filling rules being suggested by academia that could become custom, presents the real chance that, rather than the creation of the ploughshare of sustainability, new and more effective swords for lawfare will be forged.

To paraphrase Sun Tzu, “all war is deception.” In the case of outer space, the pretext in the current war in space is that an arms race and a hot war in outer space is inevitable, and can only be avoided by formal rules or international governance. Conversely, a hot war can be prevented in no small part by using lawfare to engage in the contemporary war in space using the tools of, and the abundant resources found in, the experience of attorneys and litigators in particular to supplement and support diplomats to extend the velvet glove when applicable, and bare knuckles when necessary. If the August 14 statement in Geneva is any indicator, the United States may have just done that and begun the shift from light-touch diplomacy to bringing its legal warriors to bear in full-contact lawfare to engage and win the current war in outer space and help deter a more serious hot war from occurring without sacrificing the superiority it possesses in outer space.

#### The PPWT prohibits space-based missile defense

Jack M. Beard 16, Associate Professor of Law at the University of Nebraska College of Law, Feb 15 2016, "Soft Law ’s Failure on the Horizon: The International Code of Conduct for Outer Space Activities", University of Pennsylvania Journal of International Law, Vol. 38, No. 2, 2016, <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1086&context=spacelaw>

B. Avoid Arms Control Traps in Space

Any successful effort to achieve legally binding restrictions on military activities or weapons in space must focus on specific, definable, and limited objectives or run afoul of issues that have historically ensured deadlock among suspicious and insecure adversaries.306 Some seemingly desirable goals, however, are likely to ensure failure.

The first such problematic goal involves attempting to use arms control agreements or other instruments to comprehensively ensure peace in space. Unfortunately, the integration of modern military systems on earth, sea, air and space guarantees that at some point states seeking to disrupt or deny the ability of an adversary (such as the United States) to project power will find space capabilities to be a particularly appealing target, especially in the early stages of a crisis or conflict.307 The presence of so many things of military value in space thus makes actions by an adversary to neutralize, disrupt or destroy these things likely during a major conflict on earth.308

The second problematic arms control goal in space that seems certain to ensure stalemate involves attempting to define and prohibit military technologies with a view to broadly prevent the weaponization of space. Clearly defining a space weapon for purposes of any legally binding arms control agreement is a daunting task, one which is made particularly challenging by the “essentially military nature of space technology.”309 As noted, space technologies are routinely viewed as dual-use in nature, meaning that they can be readily employed for both civilian and military uses. Determining the ultimate purpose of many space technologies may thus depend on discerning the intentions of states, a process perhaps better suited for psychological than legal evaluation. 310

Further complicating the classification of space military technologies is the inherent difficulty in distinguishing most space weapons on the basis of their offensive and defensive roles or even their specific missions.311 For example, this problem lies at the heart of debates over the status and future of ballistic missile defense (BMD) programs, since the technology underlying BMD systems and offensive ASAT weapons is often indistinguishable.312 Vague and broad soft law instruments do not resolve this problem, but create instead their own confusion and insecurity. Vague and broad provisions in legally binding agreements that do not or cannot distinguish between these missions are similarly problematic.

These issues, particularly difficulties in distinguishing ASAT and BMD systems, have figured prominently in complicating negotiations on space weapons over previous decades.313 Similarly, these concerns were a significant factor in initial U.S. opposition to the arms control measure proposed by China and Russia (the PPWT) since it prohibits states from placing any type of weapon in outer space (regardless of its military mission), thus effectively prohibiting the deployment of ballistic missile defense systems. 314 Furthermore, even if clear legal restrictions could be developed, verifying compliance with respect to technology in orbit around Earth would be very difficult (a point conceded even by China with respect to its own proposed PPWT).315

#### Causes rogue state missile threats---that escalates

Patrick M. Shanahan 19, Acting Secretary of Defense from January to June 2019, previously vice president and general manager of Boeing Missile Defense Systems, Jan 2019, "2019 MISSILE DEFENSE REVIEW", US Department of Defense, https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF

U.S. Homeland Missile Defense will Stay Ahead of Rogue States’ Missile Threats

Technology trends point to the possibility of increasing rogue state missile threats to the U.S. homeland. Vulnerability to rogue state missile threats would endanger the American people and infrastructure, undermine the U.S. diplomatic position of strength, and could lead potential adversaries to mistakenly perceive the United States as susceptible to coercive escalation threats intended to preclude U.S. resolve to resist aggression abroad. Such misperceptions risk undermining our deterrence posture and messaging, and could lead adversaries to dangerous miscalculations regarding our commitment and resolve.

It is therefore imperative that U.S. missile defense capabilities provide effective protection against rogue state missile threats to the homeland now and into the future. The United States is technically capable of doing so and has adopted an active missile defense force-sizing measure for protection of the homeland. DoD will develop, acquire, and maintain the U.S. homeland missile defense capabilities necessary to effectively protect against possible missile attacks on the homeland posed by the long-range missile arsenals of rogue states, defined today as North Korea and Iran, and to support the other missile defense roles identified in this MDR.

This force-sizing measure for active U.S. missile defense is fully consistent with the 2018 NPR, and in order to keep pace with the threat, DoD will utilize existing defense systems and an increasing mix of advanced technologies, such as kinetic or directed-energy boost-phase defenses, and other advanced systems. It is technically challenging but feasible over time, affordable, and a strategic imperative. It will require the examination and possible fielding of advanced technologies to provide greater efficiencies for U.S. active missile defense capabilities, including space-based sensors and boost-phase defense capabilities. Further, because the related requirements will evolve as the long-range threat posed by rogue states evolves, it does not allow a static U.S. homeland defense architecture. Rather, it calls for a missile defense architecture that can adapt to emerging and unanticipated threats, including by adding capacity and the capability to surge missile defense as necessary in times of crisis or conflict.

In coming years, rogue state missile threats to the U.S. homeland will likely expand in numbers and complexity. There are and will remain inherent uncertainties regarding the potential pace and scope of that expansion. Consequently, the United States will not accept any limitation or constraint on the development or deployment of missile defense capabilities needed to protect the homeland against rogue missile threats. Accepting limits now could constrain or preclude missile defense technologies and options necessary in the future to effectively protect the American people.

As U.S. active defenses for the homeland continue to improve to stay ahead of rogue states’ missile threats, they could also provide a measure of protection against accidental or unauthorized missile launches. This defensive capability could be significant in the event of destabilizing domestic developments in any potential adversary armed with strategic weapons, and as long-range missile capabilities proliferate in coming years.

U.S. missile defense capabilities will be sized to provide continuing effective protection of the U.S. homeland against rogue states’ offensive missile threats. The United States relies on nuclear deterrence to address the large and more sophisticated Russian and Chinese intercontinental ballistic missile capabilities, as well as to deter attacks from any source consistent with long-standing U.S. declaratory policy as re-affirmed in the 2018 NPR.

## 1NC – Kant <3

#### Agents must be practical reasoners:

#### First, inescapability – the exercise of practical rationality requires that one regards it as intrinsically good – that justifies a right to freedom.

Wood [Allen W. Wood, (Stanford University, California) "Kantian Ethics" Cambridge University Press, 2007, https://www.cambridge.org/core/books/kantian-ethics/769B8CD9FCC74DB6870189AE1645FAC8, DOA:8-12-2020 // WWBW]//rct st

Kant holds that the most basic act through which people exercise their practical rationality is that of setting an end (G 4:437). To set an end is, analytically, to subject yourself to the hypothetical imperative that you should take the necessary means to the end you have set (G 4:417). This is the claim that you rationally ought to do something whether or not you are at the moment inclined to do it. It represents the action of applying that means as good (G 4:414) – in the sense of “good” that Kant explicates as: what is required by reason independently of inclination (G 4:413). Kant correctly infers that any being which sets itself ends is committed to regarding its end as good in this sense, and also to regarding the goodness of its end as what also makes application of the means good – that is, rationally required independently of any inclination to apply it. The act of setting an end, therefore, must be taken as committing you to represent some other act (the act of applying the means) as good. In doing all this, however, the rational being must also necessarily regard its own rational capacities as authoritative for what is good in general. For it treats these capacities as capable of determining which ends are good, and at the same time as grounding the goodness of the means taken toward those good ends. But to regard one’s capacities in this way is also to take a certain attitude toward oneself as the being that has and exercises those capacities. It is to esteem oneself – and also to esteem the correct exercise of one’s rational capacities in determining what is good both as an end and as a means to it. One’s other capacities, such as those needed to perform the action that is good as a means, are also regarded as good as means. But that capacity through which we can represent the very idea of something as good both as end and as means is not represented merely as the object of a contingent inclination, nor is it represented as good only as a means. It must be esteemed as unconditionally good, as an end in itself. To find this value in oneself is not at all the same as thinking of oneself as a good person. Even those who misuse their rational capacities are committed to esteeming themselves as possessing rational nature. It also does not imply that a more intelligent person (in that sense, more “rational”) is “better” than a less intelligent one. The self-esteem involved in setting an end applies to any being capable of setting an end at all, irrespective of the cleverness or even the morality of the end setting. Kant’s argument supports the conclusion, to which he adheres with admirable consistency throughout his writings, that all rational beings, clever or stupid, even good or evil, have equal (absolute) worth as ends in themselves. For Kantian ethics the rational nature in every person is an end in itself whether the person is morally good or bad.

#### Second, value theory – the existence of extrinsic goodness requires unconditional human worth.

Korsgaard (Christine M., “Two Distinctions in Goodness,” The Philosophical Review Vol. 92, No. 2 (Apr., 1983), pp. 169-195, JSTOR) OS \*bracketed for gen lang\* //rct st

The argument shows how Kant's idea of justification works. It can be read as a kind of regress upon the conditions, starting from an important assumption. The assumption is that when a rational being makes a choice or undertakes an action, he or she [they] supposes the object to be good, and its pursuit to be justified. At least, if there is a categorical imperative there must be objectively good ends, for then there are necessary actions and so necessary ends (G 45-46/427-428 and Doctrine of Virtue 43-44/384-385). In order for there to be any objectively good ends, however, there must be something that is unconditionally good and so can serve as a sufficient condition of their goodness. Kant considers what this might be: it cannot be an object of inclination, for those have only a conditional worth, "for if the inclinations and the needs founded on them did not exist, their object would be without worth" (G 46/428). It cannot be the inclinations themselves because a rational being would rather be free from them. Nor can it be external things, which serve only as means. So, Kant asserts, the unconditionally valuable thing must be "humanity" or "rational nature," which he defines as "the power set to an end" (G 56/437 and DV 51/392). Kant explains that regarding your existence as a rational being as an end in itself is a "subjective principle of human action." By this I understand him to mean that we must regard ourselves as capable of conferring value upon the objects of our choice, the ends that we set, because we must regard our ends as good. But since "every other rational being thinks of his existence by the same rational ground which holds also for myself' (G 47/429), we must regard others as capable of conferring value by reason of their rational choices and so also as ends in themselves. Treating another as an end in itself thus involves making that person's ends as far as possible your own (G 49/430). The ends that are chosen by any rational being, possessed of the humanity or rational nature that is fully realized in a good will, take on the status of objective goods. They are not intrinsically valuable, but they are objectively valuable in the sense that every rational being has a reason to promote or realize them. For this reason it is our duty to promote the happiness of others-the ends that they choose-and, in general, to make the highest good our end.

#### Third, practical reason – ethical principles must be derived from the structure of reason:

#### [1] Regress – we can always ask why we should follow a theory, so they aren’t binding because they don’t have a starting point. Practical reason solves – When we ask why we should follow reason, we demand a reason, which concedes to the authority of reason itself, so it’s the only thing we can follow

#### [2] Action Theory – every action can be broken down to infinite amounts of movements, i.e. me moving my arm can be broken down to the infinite moments of every state my arm is in. Only reason can unify these movements because we use practical reason to achieve our goals, means all actions collapse to reason

#### Fourth, epistemology – ethics must begin a priori, meaning they can’t be derived from our experience.

#### [A] Representations of space – we can only access our experiences if we can interpret the space around us, but that requires the a priori. Thinking of the absence of space is impossible – we can think of empty space but never the lack of space itself. Imagining space through a priori thoughts is the only way we can even begin to have a conception of interpreting experience; we need to be able to construct space through our minds.

#### [B] Separateness – if space is based on experience, it must be formed from objects separate to us outside of our reasoning abilities. But to represent objects as separate from us, we would already need to assume space exists in the first place to have a concept of “separateness,” so to represent space as something separate from us would be incoherent.

#### [C] Uncertainty – every person has different experiences so we can’t have a unified perspective on what is good if we each have different conceptions of it – even if we can roughly aggregate it’s not enough because there’ll always be a case when it fails so the framework o/w on probability.

#### [D] Is/Ought Gap – experience in the phenomenal world only tells us what is, not what ought to be. But it’s impossible to derive an ought from descriptive premises, so there needs to be additional a priori premises within the noumenal world to make a moral theory.

#### Practical reason means we all have a unified perspective: What can be justified to me can be justified to everyone who is a practical reasoner. If I can conclude that 2+2 is 4, then I understand not only that I know 2+2 is 4, but that everyone around me can arrive at the same conclusion. These things are temporally consistent: I know that me adding two numbers now and taking that sum will not result in me adding the same two numbers in the future and getting a different sum. Our unified perspective does not change but rather stays consistent.

#### But, willing an action that violates the freedom of others is a contradiction: If I decide to kill someone, that action is not universalizable because that would justify other people killing me too. If I die, I cannot exercise my freedom to kill someone else. This is a contradiction: I both justify extending my freedom to kill others and limiting my own freedom.

#### Thus, the standard is respecting freedom.

## Offense

#### Negate:

#### Acquisition of property can never be unjust – to create rights violations, there must already be an owner of the property being violated, but that presupposes its appropriation by another entity.

Feser 1, (Edward Feser, 1-1-2005, accessed on 12-15-2021, Cambridge University Press, "THERE IS NO SUCH THING AS AN UNJUST INITIAL ACQUISITION | Social Philosophy and Policy | Cambridge Core", Edward C. Feser is an American philosopher. He is an Associate Professor of Philosophy at Pasadena City College in Pasadena, California. [https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)[brackets](https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)%5bbrackets) for gen lang]//phs st

There is a serious difficulty with this criticism of Nozick, however. It is just this: There is no such thing as an unjust initial acquisition of resources; therefore, there is no case to be made for redistributive taxation on the basis of alleged injustices in initial acquisition. This is, to be sure, a bold claim. Moreover, in making it, I contradict not only Nozick’s critics, but Nozick himself, who clearly thinks it is at least possible for there to be injustices in acquisition, whether or not there have in fact been any (or, more realistically, whether or not there have been enough such injustices to justify continual redistributive taxation for the purposes of rectifying them). But here is a case where Nozick has, I think, been too generous to the other side. Rather than attempt —unsatisfactorily, in the view of his critics—to meet the challenge to show that initial acquisition has not in general been unjust, he ought instead to have insisted that there is no such challenge to be met in the first place. Giving what I shall call “the basic argument” for this audacious claim will be the task of Section II of this essay. The argument is, I think, compelling, but by itself it leaves unexplained some widespread intu- itions to the effect that certain specific instances of initial acquisition are unjust and call forth as their remedy the application of a Lockean proviso, or are otherwise problematic. (A “Lockean proviso,” of course, is one that forbids initial acquisitions of resources when these acquisitions do not leave “enough and as good” in common for others.) Thus, Section III focuses on various considerations that tend to show how those intuitions are best explained in a way consistent with the argument of Section II. Section IV completes the task of accounting for the intuitions in question by considering how the thesis of self-ownership itself bears on the acqui- sition and use of property. Section V shows how the results of the previ- ous sections add up to a more satisfying defense of Nozickian property rights than the one given by Nozick himself, and considers some of the implications of this revised conception of initial acquisition for our under- standing of Nozick’s principles of transfer and rectification. II. The Basic Argument The reason there is no such thing as an unjust initial acquisition of resources is that there is no such thing as either a just or an unjust initial acquisition of resources. The concept of justice, that is to say, simply does not apply to initial acquisition. It applies only after initial acquisition has already taken place. In particular, it applies only to transfers of property (and derivatively, to the rectification of injustices in transfer). This, it seems to me, is a clear implication of the assumption (rightly) made by Nozick that external resources are initially unowned. Consider the following example. Suppose an individual A seeks to acquire some previously unowned resource R. For it to be the case that A commits an injustice in acquiring R, it would also have to be the case that there is some individual B (or perhaps a group of individuals) against whom A commits the injustice. But for B to have been wronged by A’s acquisi- tion of R, B would have to have had a rightful claim over R, a right to R. By hypothesis, however, B did not have a right to R, because no one had a right to it—it was unowned, after all. So B was not wronged and could not have been. In fact, the very first person who could conceivably be wronged by anyone’s use of R would be, not B, but A himself, since A is the first one to own R. Such a wrong would in the nature of the case be an injustice in transfer—in unjustly taking from A what is rightfully his—not in initial acquisition. The same thing, by extension, will be true of all unowned resources: it is only after some- one has initially acquired them that anyone could unjustly come to possess them, via unjust transfer. It is impossible, then, for there to be any injustices in initial acquisition.7

#### To own yourself and use your own freedom is to be able to interact with external objects. Anything else makes you unable to exercise your own freedom on other things and creates a contradiction.

Feser 2, (Edward Feser, 1-1-2005, accessed on 12-15-2021, Cambridge University Press, "THERE IS NO SUCH THING AS AN UNJUST INITIAL ACQUISITION | Social Philosophy and Policy | Cambridge Core", Edward C. Feser is an American philosopher. He is an Associate Professor of Philosophy at Pasadena City College in Pasadena, California. [https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)[brackets](https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)%5bbrackets) for gen lang]//phs st

There is. An alternative, soft-line approach could acknowledge that the initial acquirer who abuses a monopoly over a water hole (or any similar crucial resource) does commit an injustice against those who are disad- vantaged, but such an approach could still hold that the acquirer never- theless has not committed an injustice in acquisition —his acquisition was, as I have said, neither just nor unjust. Nor does he fail to own what he has acquired; he still cannot be said to have stolen the water from anyone. Rather, his injustice is an unjust use of what he owns, on a par with the unjust use I make of my self-owned fist when I wield it, unprovoked, to bop you on your self-owned nose. In what sense does the water-hole owner use his water unjustly, though? He doesn’t try to drown anyone in it, after all— indeed, the whole problem is that he won’t let anybody near it! Eric Mack gives us the answer we need in what he has put forward as the “self-ownership proviso” (SOP).28 This is a proviso not (as the Lock- ean proviso is) on the initial acquisition of property, but rather on how one can use his property in a way that respects others’ self-ownership rights. It is motivated by consideration of the fact that the talents, abilities, capac- ities, energies, etc., that a person rightfully possesses as a self-owner are inherently “world-interactive”; that is, it is of their very essence that they are directed toward the extra-personal environment.29 Your capacity to use your hand, for instance, is just a capacity to grasp and manipulate external objects; thus, what you own in owning your hand is something essentially grasping and manipulating.30 Now if someone were to cut off your hand or invasively keep you from using it (by tying your arm against your body or holding it behind your back), he would obviously be violating your self-ownership rights. But there are, Mack suggests, other, noninvasive ways in which those rights might be violated. If, to use an example of Mack’s, I effectively nullify your ability to use your hand by creating a device that causes anything you reach for to be propelled beyond your grasp, making it impossible for you ever to grasp or manip- ulate anything, I have violated your right to your hand as much as if I had cut it off or tied it down. I have, in any case, prevented your right to your hand from being anything more than a formal right, one that is practically useless. In the interests of guaranteeing respect for substantive, robust rights of self-ownership, then, “[t]he SOP requires that persons not deploy their legitimate holdings, i.e., their extra-personal property, in ways that severely, albeit noninvasively, disable any person’s world-interactive powers.” 31 The SOP follows, in Mack’s view, from the thesis of self-ownership itself; or, at any rate, the considerations that would lead anyone to accept that thesis should also, in his view, lead one to accept the proviso.32 A brief summary of a few of Mack’s thought experiments should suffice to give a sense of why this is so.33 In what Mack calls the Adam’s Island example, Adam acquires a previously uninhabited island and later refuses a shipwrecked Zelda permission to come ashore, as a result of which she remains struggling at sea (and presumably drowns). In the Paternalist Caging example, instead of drowning, Zelda becomes caught offshore in a cage Adam has constructed for catching large sea mammals, and, rather than releasing her, Adam keeps her in the cage and feeds her regularly. In the Knuckle-Scraper Barrier example, Zelda falls asleep on some unowned ground, whereupon a gang of oafish louts encircles her and, using their bodies and arms as barriers, refuses to let her out of the circle (accusing her of assault if she touches them in order to climb over or break through). In the Disabling Property Barrier example, instead of a human barrier, Adam constructs a plastic shield over and around the unowned plot of ground upon which Zelda sleeps, accusing her of trespassing upon his property when she awakens and tries to escape by breaking through the plastic. And in the (similarly named) Disabling Property Barriers example, seem to suggest an Aristotelian-Thomistic conception of natural function, and though this by no means troubles me, it might not be what Mack himself has in mind (nor, of course, is it something every philosopher is going to sympathize with). Mack’s view nevertheless seems to require something like this conception. And something like it —enough like it to do the job Mack needs to be done, anyway—is arguably to be found in Larry Wright’s well- known reconstruction, in modern Darwinian terms, of the traditional notion of natural function. See Larry Wright, “Functions,” Philosophical Review 82, no. 2 (1973): 139–68. Adam, instead of enclosing Zelda in a plastic barrier, encloses in plastic barriers every external object that Zelda would otherwise be able to use — thus, in effect, enclosing her in a larger, all-encompassing plastic barrier of a more eccentric shape. In all of these cases, Mack says, although Zelda’s formal rights of self-ownership have not been violated—no one has invaded the area enclosed by the surface of her skin —her rights over her self-owned powers, and in particular her ability to exercise those powers, have nevertheless been nullified. But a plausible self-ownership- based theory surely cannot allow for this. It cannot, for instance, allow the innocent Zelda justly to be imprisoned in any of the ways described! If Mack is right, then it seems we have, in the SOP, grounds for holding that a water-hole monopolist would indeed be committing an injustice against anyone he refuses water to, or to whom he charges exorbitant prices for access. The injustice would be a straightforward violation of a person’s rights to self-ownership, a case of nullifying a person’s self- owned powers in a way analogous to Adam’s or the knuckle-scrapers’ nullification of Zelda’s self-owned powers. It would not be an injustice in initial acquisition, however. The water-hole monopolist still owns the water hole as much as he ever did; he just cannot use it in a way that violates other individuals’ self-ownership rights (either by drowning them in it or by nullifying their self-owned powers by denying them access to it when there is no alternative way for them to gain access to the water necessary for the use of their self-owned powers). Is Mack right? The hard-liner might dig in his heels and insist that none of Mack’s examples amount to self-ownership-violating injustices; instead, they are merely subtle but straightforward property rights violations or cases of moral failings of various other sorts (cruelty, selfishness, etc.). The Adam’s Island case, for starters, is roughly analogous to the example of the water-hole monopolist, so that it arguably cannot give any non-question- begging support to the SOP, if the SOP is then supposed to show that the water-hole example involves an injustice. The Disabling Property Barriers case might also be viewed as unable to provide any non-question-begging support, since Adam’s encasing everything in plastic might plausibly be interpreted as his acquiring everything, in which case we are back to a water-hole-type monopoly example. The Knuckle-Scraper Barrier and Dis- abling Property Barrier examples might be explained by saying that in falling asleep on the unowned plot of land, Zelda in effect has come (at least temporarily) to acquire it, and (by virtue of walking) to acquire also the path she took to get to it, so that the knuckle-scrapers and Adam violate her property rights (not her self-ownership rights) in not allowing her to escape. The Paternalist Caging example can perhaps be explained by arguing that in building the cage, Adam has acquired the water route leading to it, so that in swimming this route (and thus getting caught in the cage) Zelda has violated his property rights and, therefore, can justly be caged. Accordingly, the hard-liner might insist, we can explain all of these examples in a hard-line way and thus avoid commitment to the SOP. Such a hard-line response would be ingenious (well, maybe), but still, I think, ultimately doomed to failure. Can the Paternalist Caging example, to start with, plausibly be explained away in the manner that I have suggested? Does Adam commit no injustice against Zelda even if he never lets her out? It will not do to write this off merely as a case of excessive punishment (explaining the injustice of which would presumably not require commitment to the SOP). For suppose Adam says, after a mere five minutes of confinement, “I’m no longer punishing you; you’ve paid your debt and are free to go, as far as I’m concerned. But I’m not going to bother exerting the effort to let you out. I never forced you to get in the cage, after all —you did it on your own —and you have no right to the use of my self-owned cage-opening powers to fix your mistake! So teleport out, if you can. Or get someone else —if you can find someone —to let you out.” Adam would be neither violating Zelda’s rights to external property nor excessively punishing her in this case; nor would he be invasively vio- lating her self-ownership rights. But wouldn’t he still be committing an injustice, however noninvasively? Don’t we need something like the SOP to explain why this is so? The barrier examples, for their part, do not require Zelda’s walking and falling asleep on virgin territory, which thus (arguably) becomes her prop- erty. We can, to appeal to the sort of science-fiction scenario beloved of philosophers, imagine instead a bizarre chance disruption of the structure of space-time that teleports Zelda into Adam’s plastic shell or into the midst of the knuckle-scrapers. There is no question now of their violating her property rights; yet don’t they still commit an injustice by nullifying her self-owned powers in refusing to allow her to exit? Consider a parallel example concerning property ownership itself. If your prized $50,000 copy of Captain America Comics number 1, due to another rupture in space-time or just to a particularly strong wind that blows it out of your hands and through my window, suddenly appears on the floor of my living room, do I have the right to refuse to bring it back out to you or to allow you to come in and get it? Suppose I attempt to justify my refusal by saying, “I won’t touch it, and you’re free to have it back if you can arrange another space-time rupture or gust of wind. But I refuse to exert my self-owned powers to bring it out to you, or to allow you on my property to get it. I never asked for it to appear in my living room, after all!” Would anyone accept this justification? Doesn’t your property right in the comic book require me to give it back to you? The hard-liner might suggest that this example transports the SOP advocate out of the frying pan and into the fire. For if the SOP is true, wouldn’t we also have to commit ourselves to a “property-ownership proviso” (POP) that requires us not to nullify anyone’s ability to use his external private property in a way consistent with its “world-interactive powers”? If I build a miniature submarine in my garage, and you have the only swimming pool within one thousand miles, must you allow me the use of your pool lest you nullify my ability to use the sub? If (to take an example of Cohen’s cited by Mack) I own a corkscrew, must I be provided with wine bottles to open lest the corkscrew sadly fail to fulfill its full potential?34 Mack’s response to this line of thought seems basically to amount to a bit of backpedaling on the claim that his proviso really follows from the notion of self-ownership per se —so as to avoid the conclusion that a (rather unlibertarian and presumably redistributionist) POP would also, in par- allel fashion, follow from the concept of property ownership. His response seems, instead, to emphasize the idea that the considerations favoring self-ownership also favor, via an independent line of reasoning, the SOP.35 In my view, however, a better response would be one that took note of some relevant disanalogies between property in oneself and property in external things. Note first that the self-owned world-interactive powers, the possible use of which the SOP is intended to guarantee, are possessed by a living being who is undergoing development, which involves passing through various stages; therefore, these powers are ones that flourish with use and atrophy or even disappear with disuse.36 To nullify these powers even for a limited time, then, is (very often at least) not merely temporarily to inconvenience their owner, but, rather, to bring about a permanent reduc- tion or even disablement of these powers. By contrast, a submarine (or a corkscrew) retains its powers even when left indefinitely in a garage (or a drawer). This difference in the effect that nullification has on self-owned powers versus extra-personal property plausibly justifies a difference in our judgments concerning the acceptability, from the point of view of justice, of such nullification in the two cases; that is, it justifies adoption of the SOP but not of the POP.37 Second, there is an element of choice (and in particular, of voluntary acquisition) where extra-personal property is concerned that is morally relevant here. One’s self-owned powers, along with the SOP-guaranteed right to the non-nullification of those powers, are not something one chooses or acquires; one just has them —indeed, to a great degree one just is the constellation of those powers, abilities, etc.—and owns them fully. By contrast, extra-personal property is something one chooses to acquire or not to acquire, and as we have seen, one always acquires property rights in various degrees, from partial to full ownership—and this would include the rights guaranteed by a POP. If one chooses to acquire a corkscrew under conditions where wine bottles are unavailable, or are even likely at some point to become unavailable, one can hardly blame others if one finds oneself bottle-less. To fail to acquire POP-like rights regarding the corkscrew (by, say, contracting with someone else to provide one with wine bottles in perpetuity) is not the same thing as to have those rights and then have them violated. Someone who buys a corkscrew and then finds that he cannot use it is like the person who acquires only partial property rights in a water hole that others have already acquired partial use rights over. He cannot complain that his co-owners have violated his rights; he never acquired those other rights in the first place. Similarly, the corkscrew owner cannot complain that he has no bottles to open; he never acquired the right to those bottles, only to the corkscrew. If full ownership of a corkscrew requires POP-like rights over it, then all that follows is that corkscrew owners who lack bottles are not full owners of their corkscrews.

#### Thus, self-ownership justifies the appropriation of property – our freedom necessitates being able to set and pursue external things as our ends, including exercising our rights on property. Restricting this arbitrarily limits our freedom which is unjust.

Feser 3, (Edward Feser, 1-1-2005, accessed on 12-15-2021, Cambridge University Press, "THERE IS NO SUCH THING AS AN UNJUST INITIAL ACQUISITION | Social Philosophy and Policy | Cambridge Core", Edward C. Feser is an American philosopher. He is an Associate Professor of Philosophy at Pasadena City College in Pasadena, California. [https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)[brackets](https://www.cambridge.org/core/journals/social-philosophy-and-policy/article/abs/there-is-no-such-thing-as-an-unjust-initial-acquisition/5C744D6D5C525E711EC75F75BF7109D1)%5bbrackets) for gen lang]//phs st

V. Some Implications If what I have argued so far is correct, then the way is opened to the following revised case for strongly libertarian Lockean-Nozickian prop-erty rights: We are self-owners, having full property rights to our body parts, powers, talents, energies, etc. As self-owners, we also have a right, given the SOP, not to have our self-owned powers nullified —we have the right, that is, to act within the extra-personal world and thus to acquire rights to extra-personal objects that the use of our self-owned powers requires.39 This might involve the buying or leasing of certain rights or bundles of rights and, correspondingly, the acquiring of lesser or greater degrees of ownership of parts of the external world, but as long as one is able to exercise one’s powers to some degree and is not rendered incapable of acting within that world, the SOP is satisfied. In any case, such rights can only be traded after they are first established by initial acquisition. In initially acquiring a resource, an agent does no one an injustice (it was unowned, after all). Furthermore, [they] has mixed [their] labor with the resource, significantly altering it and/or bringing it under his control, and is himself solely responsible for whatever value or utility the resource has come to have. Thus, [they] has a presumptive right to it, and, if his control and/or alteration (and thus acquisition) of it is (more or less) complete, his own- ership is accordingly (more or less) full. The system of strong private property rights that follows from the acts of initial acquisition performed by countless such agents results, as a matter of empirical fact, in a market economy that inevitably and dramatically increases the number of resources available for use by individuals, and these benefited individuals include those who come along long after initial acquisition has taken place. (Indeed, it especially includes these latecomers, given that they were able to avoid the hard work of being the first to “tame the land” and draw out the value of raw materials.)40 The SOP is thus, in fact, rarely, if ever, violated. The upshot is that a system of Lockean-Nozickian private property rights is morally justified, with a strong presumption against tampering with exist- ing property titles in general. In any case, there is a strong presumption against any general egalitarian redistribution of wealth, and no case what- soever to be made for such redistribution from the general theory of prop- erty just sketched, purged as it is of the Lockean proviso, with all the egalitarian mischief-making the proviso has made possible.

# Case

## Case

### 1NC Debris Good – STM

#### Collisions now are good---they spur international momentum for STM standards which solves future, deadlier debris and a slew of external impacts

—Sustainable deep spaceflight, GNSS normsetting, GEO orbital slots, and avoiding collisions in LEO and in the air

Larsen 18 – Professor of air and space law for more than forty years at SMU and Gtown

Paul B. Larsen, taught air and space law for more than forty years respectively at Southern Methodist University and at Georgetown University, co-author of Space Law: A Treatise which is THE foundational & ubiquitous space law textbook, ARTICLE: SPACE TRAFFIC MANAGEMENT STANDARDS, 83 J. Air L. & Com. 360, 2018

This article is about the need for space traffic standards. It specifically focuses on international space traffic standards. Space traffic is currently tracked by radar. But, many objects - mainly space debris - moving in outer space are too small to be [\*361] tracked and are still dangerous. The Kessler Syndrome predicts frequent collisions with increasing space debris in outer space in the near future. A four-fold increase in navigable outer space objects is likely. Therefore, organization of space traffic is urgently needed. INTRODUCTION: INTERNATIONAL MINIMUM SPACE TRAFFIC STANDARDS Existing space traffic management is linked to existing space law, primarily the Outer Space Treaty, the International Telecommunications Union (ITU) legal regime, and the Inter-Agency Space Debris Coordination Committee (IADC) space debris guidelines. Currently, there are no "rules of the road" in outer space. Even if one country adopts unilateral space traffic rules of the road, it cannot thereby control the traffic from other countries. Only international traffic rules can establish effective rules of the road for space objects. The premise of this paper is that international minimum space safety regulations will be implemented through domestic laws and regulations, and that international uniformity can be achieved. The minimum space traffic standards would apply to civilian traffic only. There are very successful models for international minimum standards in international civil and maritime transportation. 1Link to the text of the note There are equally successful international standards in international satellite telecommunication. 2Link to the text of the note All these regimes - air, sea, and space - concern safety, control, and management of traffic in territory that is not sovereign and thus not subject to regulation by national states. Besides the International Civil Aviation Organization (ICAO) and ITU models, this article also discusses models based on the current Committee on the Peaceful Uses of Outer Space (COPUOS)'s work on sustainable action guidelines, the IADC space debris guidelines, the COPUOS efforts to coordinate Global Navigation Satellite System (GNSS) services, and on traffic data coordination by the Space Data Association. [\*362] These six models should be considered only insofar that any of them or any of their parts suit new space technology. Because of the extreme speed with which objects move, 3Link to the text of the note outer space is inherently ultrahazardous. It is difficult to keep space objects from colliding. The outer space environment is unforgiving. It cannot be repaired. It does not have Earth's capability of constant reconstitution. Thus, huge amounts of dangerous space debris from past space activities have accumulated. For example, the Cosmos-Iridium collision in 2009 and the Chinese destruction of a defunct satellite in 2007 resulted in great increases of space debris. 4Link to the text of the note It is not yet possible to clean outer space. Moreover, outer space is inherently fragile. There is no tolerance of collisions and accidents. At this time, it is as if the world is waiting for major traffic collisions to occur in outer space in order to be motivated to establish international rules of the road. Space traffic management is a public safety issue. This will become evident as outer space collisions begin to multiply. As space traffic is changing from being predominantly military to being mostly civilian, the nature of space traffic management is changing from having a predominantly national security purpose to predominantly addressing the civil issue of public safety. Outer space traffic is expected to increase four-fold in the near term. 5Link to the text of the note The explosive growth of small satellites during the next few years plus the increase in space debris without any immediate prospect of significant debris removal will intensify the dangers. The collision prospects described by the Kessler space debris syndrome are looming. One expert predicts that "from 2036 collisions [will] start to occur regularly[.]" 6Link to the text of the note After that time, it will be increasingly difficult to maneuver satellite traffic adequately to avoid collisions. The greatest traffic danger will be in [\*363] low Earth orbit (LEO) because of the rapid increase in small satellites orbiting in LEO. The Outer Space Treaty, Article VI, 7Link to the text of the note places the duty on the individual states to license and continuously supervise their nongovernmental outer space operators to ensure that they comply with the Outer Space Treaty and other international space law. There are no international space traffic navigation standards and procedures. Currently space traffic management occurs through individual states. There is only negligible international coordination of space traffic such as through the UN space debris guidelines and the ITU regulation of satellite orbits. The great speed with which all objects orbit in outer space makes their coexistence more tenuous. Moreover, the kinds of objects in orbit differ greatly. One of those orbiting objects is the International Space Station with astronauts on board. Fortunately, the space station is constantly being navigated to avoid objects threatening it in orbit. In the future, more inhabited space vehicles aimed for deep space will pass through the earthly orbits of other objects. A major incentive for establishing order in space traffic is that the operators do not want to endanger their satellites in collisions or be subject to interferences. Thus, the operators are practicing maximum space situational awareness. But devastating accidents are beginning to occur. The 2009 Iridium collision with a defunct Cosmos satellite in LEO was a warning. The Chinese annihilation of one of their spent satellites by an anti-satellite weapon (ASAT) in 2007 in LEO illustrates how one collision will result in thousands of additional uncontrolled small space [\*364] debris objects in outer space. 8Link to the text of the note The launching states are responsible for negligent acts in accordance with the Liability Convention, Art. II. 9Link to the text of the note Thus, each satellite operator and its launching state incurs a huge liability exposure by negligently causing debris. In addition to traffic hazards, there are considerable hazards in outer space caused by transit of deorbiting live and defunct space objects requiring coordination with air traffic management. Outer space traffic could safely be managed much more intensely so as to allow more traffic in outer space similar to the way air traffic is managed in air space. 10Link to the text of the note International space flight rules could result in greater efficiency. Space traffic in Geostationary Orbit (GSO), in Mid Earth Orbit (MEO), and in LEO differ in kind and intensity. The GSO is so unique and narrow that the ITU early identified GSO orbital slots as being scarce and requiring special management, including special consideration for the developing countries. 11Link to the text of the note MEO is used by GNSS satellites, 12Link to the text of the note and LEO is used by a variety of small remote sensing communication satellites. Prospectively there will be visits by tourists. 13Link to the text of the note A complication of a different nature is the extensive use of all these orbits by diverse military satellites and weaponry. All these space objects tend to be navigable. International space flight rules would greatly improve space traffic management in GSO, MEO, and LEO.

**A] GEO slots---they creates multiple scenarios for conflict in space**

--Overcrowding GEO makes miscalc more likely – unclear who is responsible for what andn how to decide responsibility

--takes out communication satellites which provide essential early warning

**Klotz 99**—Commander, Air Force Global Strike Command, Barksdale Air Force Base [Lt. Gen. Frank G. Klotz, Jan 1999, Space, Commerce, and National Security, Council on Foreign Relations, p.23-4]

The scramble for geosynchronous slots and frequency allocations may in fact intensify as even more telecommunications satellites are launched and space becomes even more "crowded." For the most part, the ITU has resolved most conflicts. Nevertheless, the occasional breakdowns in the process for managing and regulating this competition give pause for concern. Interference--inadvertent or deliberate--could in fact pose a more immediate threat to U.S. military and commercial interests than any nascent capability on the part of potential adversaries to deliberately attack American space systems in crisis or conflict. The possible interruption of the GPS signal by commercial communications satellites-with all its implications for military operations and the global information infrastructure-is a case in point.

#### B] GNSS---absent management, it’ll be hit, causing escalation

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Peter, “Navigation warfare: the battle lines,” International Institute for Strategic Studies, December 21, 2018, https://www.iiss.org/blogs/military-balance/2018/12/navigation-warfare-battle-lines

Military systems are ever more reliant on GNSS for command and control, navigation and precision-guided munition delivery. Such is the importance of satellite navigation systems that they are increasingly the focus of hostile intent to degrade performance or deny access. One vulnerability is embedded in the space-based nature of the system. The thousands of kilometres between the satellite and the receiver mean the signals are relatively weak compared to most other commercial radio signals, which usually must travel only tens or a few hundred kilometres. Jammers can be used to transmit noise over the frequency band used by GNSS to inhibit reception. Comparatively simple and low-cost jammers aimed at interfering with commercial applications are widely available. Jamming and spoofing States and some non-state actors have developed or acquired more sophisticated high-power jammers, with signal emissions frequently registered in Syria, eastern Ukraine and North Korea. In April 2013, navigation systems of South Korean aircraft and mobile telephone networks in the South Korean capital, Seoul, were severely disrupted by a 50-watt jamming system apparently transmitting from North Korea. Along with simple jamming, spoofing devices that intimate true GNSS data have also been developed to manipulate the position and timing solution determined by receivers. While jamming simply removes the ability to receive GNSS signals, spoofing is more insidious, with the potential to sway decision-making and actions by generating false positioning and timing. Today military and civilian groups have the capability to spoof unencrypted GNSS signals with ease. Conventional spoofing techniques, however, are not effective against encrypted military GNSS systems such as the P(Y) version of GPS without prior knowledge of the encryption key. But these signals could be vulnerable to another form of spoofing known as meaconing (masked beaconing). This technique uses a signal repeater to capture and rebroadcast genuine signals with a time offset. In practice, this effect is challenging to produce against advanced receivers with inbuilt signal integrity checks. Given how cheaply and easily jamming and spoofing can be implemented, GNSS denial could become a potent tool available for organisations fighting asymmetric – or tolerance – warfare.

#### Debris now is self-contained---that means accidents now are better

Park 18

Ye Joo Park, citing NASA studies on orbital debris, How Dangerous is Space Debris?, Research Association for Interdisciplinary Studies, RAIS Conference Proceedings, November 19-20, 2018, DOI: 10.5281/zenodo.1572516, <https://ssrn.com/abstract=3303541>

Other factors to consider concerning collisions in Space While it’s true that there are thousands of space objects directly above Earth in an 800-kilometer band, space is so vast that it’s helpful to pause for a moment and reflect... in the area directly above the entire continental U.S., there are typically only three or four items orbiting above 3.1 million square miles. Therefore, the likelihood of collisions between satellites, spacecraft and orbiting objects is very small (NASA 2018). In fact, in 2013 it was reported that the probability of a collision between an orbiting asset and space debris larger than 1 cm (0.4in.) will be once every 1.5-2 years, according to the Head of the Russian Hall/ History of Space Debris 8 Figure 5 [NASA] Space Agency. This compares with a 2010 estimate giving the likelihood of once every 5 years (Sorokin 2013). The Feasibility of Practically Reducing Space Debris Reducing orbital debris is incredibly difficult. Therefore, the most important action that space experts and policy makers currently recommend is to prevent the unnecessary creation of additional orbital debris. This can be done through prudent vehicle design and operations ((UNOOSA 2014). The International Academy of Astronautics or IAA is a significant, global organization of scientists and space experts from many countries who meet regularly to discuss the importance of space debris as a policy issue. The subject-matter experts of the IAA published their fifth update Situation Report on Space Debris in August 2017 (Bonnal and McKnight 2017). In the executive summary, the IAA reported that if an orbiting satellite impacts with small bits of debris - even as small as 5 mm - the result will be grave, e.g. the collision would likely disrupt or terminate a satellite’s operations (Bonnal and McKnight 2017, 5). The serious warnings expressed in this conclusion are offset by the positive findings of the IAA that there has been a reduction of the space debris created from the two extraordinary satellite destruction events (2007 and 2009) cited earlier in this paper. According to the IAF report, a large amount of debris from the satellite explosions were frictionally burned when reaching the Earth’s atmosphere after gradually sinking due to the scientific principle of atmospheric drag (in the science of Physics), which is a deterioration in the strength of an orbit because of an object hitting gas molecules in space. Small bits of space junk sink as the orbit gets weaker... then they burn. This is a positive trend “for keeping the short-term collision hazard under control at the lower altitudes (i.e., less than 650 km)” (Bonnal and McKnight 2017, 7).