# Speech 1AC UH Rd 2 vs Strake 1-14 4PM

#### Unjust means unfair.

U.S. Supreme Court 97 [Brackets Original. 521 U.S. 591 (1997) AMCHEM PRODUCTS, INC., et al. v. WINDSOR ET AL. No. 96-270. United States Supreme Court. Argued February 18, 1997. Decided June 25, 1997. Accessed 1/11/21. <https://scholar.google.com/scholar_case?case=10149606034909104692&q=definition+of+unjust+as+unfair&hl=en&as_sdt=6,44> //Xu]

The Rule 23(b)(3) predominance inquiry tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation. See 7A Wright, Miller, & Kane 518— 519.[19] The inquiry appropriate under Rule 23(e), on the other hand, protects unnamed class members "from unjust or unfair settlements affecting their rights when the representatives become fainthearted before the action is adjudicated or are able to secure satisfaction of their individual claims by a compromise." See 7B Wright, Miller, & Kane § 1797, at 340-341. But it is not the mission of Rule 23(e) to assure the class cohesion that legitimizes representative action in the first place. If a common interest in a fair compromise could satisfy the predominance requirement of Rule 23(b)(3), that vital prescription would be stripped of any meaning in the settlement context.

#### Theory after phil

### FW

#### Ethics must solve the question of perspectivism – uncertain and arbitrary guidelines for ethics allows agents to inconsistently understand morality or arbitrarily opt out which renders ethics useless since it can’t serve as a guide to action.

#### 1] Opacity – we can never access another person’s perspective because we can never fully understand who someone else is or what they think. Every truth I create cannot be universalized because I can’t guarantee that they will create the same truth because they do what they want.

#### 2] Resolvability – Centuries of moral debate proves we can’t come to an objectively correct answer so it has to be indexed to individual subjects. High school debaters can’t come to a correct conclusion on their own and moral dilemmas are too complicated to “solve” in 45 minutes, so you should prefer a perspectivist account.

#### 3] Subjectivity only has meaning when it interacts with other machines – there are no intrinsic values and a failure to recognize that stratifies subjects and reifies violence.

**Malins 04** [Brackets Original. Peta Malins (Program Manager of the Bachelor of Legal and Dispute Studies and a Lecturer in Criminology and Justice Studies @ RMIT University). “Machinic Assemblages: Deleuze, Guattari and an Ethico-Aesthetics of Drug Use”. The University of Melbourne. 2004. Accessed 2/19/21. http://janushead.org/wp-content/uploads/2020/06/Malins.pdf //Xu]

As an assemblage, a [drug using body] has only itself, in connection with other assemblages and in relation to other bodies without organs. We will never ask what a [drug using body] means, as signified or signifier; we will not look for anything to understand in it. We will ask what it functions with, in connection with what other things it does or does not transmit intensities, in which other multiplicities its own are inserted and metamorphosed, and with what bodies without organs it makes its own converge. A [drug using body] exists only through the outside and on the outside. A [drug using body] itself is a little machine (Deleuze and Guattari, 1988: 4)1 The work of Deleuze and Guattari is perhaps best conceived of as a ‘tool box’2 –as a collection of machinic concepts that can be plugged into other machines or concepts and made to work. This is how I approach their writing, and why–despite initial misgivings–I have transformed the above excerpt (surreptitiously replacing the concept ‘book’ with ‘drug using body’) to suit the purposes of this paper. In making this transformation, I soon discovered that it became a perfect little language-machine: not only articulating where I want to take the concept of drug use, but also [through its parentheses] expressing the open applicability of Deleuze and Guattari’s work. Insert body of choice: a sexual body; a bicycle, a language; a body of art; a film–the excerpt works for them all. In this openly mutating state the passage introduces some of the key concepts in Deleuze and Guattari’s philosophical project: becomings, rhizomatic connections, and multiplicities. It also, more explicitly, outlines their project to take thought (and ethics) away from internal meanings, causes, and essences, and toward surface effects, intensities and flows. However it is the particular concept of the body activated by the excerpt–the concept of the body as machinic assemblage–that I find most useful to the task of rethinking drug use. It is a concept that unravels the modern fantasy of the body as a stable, unified, bounded entity, and gives a language to the multitude of connections that bodies form with other bodies (human and otherwise). A body’s function or potential or ‘meaning’ becomes entirely dependent on which other bodies or machines it forms an assemblage with. Colebrook’s (2002) example of the bicycle is useful here: a bicycle is a machine that doesn’t begin to work or have a particular meaning until it connects up with another machine. When it connects up with a cyclist, it becomes a vehicle; when is placed in a gallery, it becomes an artwork. A cigarette is similarly multiple: when smoked it becomes a drug; when held seductively at the end of ones fingertips it becomes an object of beauty; when shown in a film it becomes a plot device (Klein, 1993). And a drug using body is no different: when it connects up to bicycle, it becomes a cyclist; to a cigarette, a smoker; to LSD, a tripper. The drug using body is multiple. While numerous writers have begun to make movements toward rethinking drug use via Deleuze and Guattari3 , very few have explored this intersection in detail4 . In this paper I will map out some of the specific implications of rethinking the drug using body in this way. I will begin by exploring what happens to the subject (the ‘drug user’, the ‘addict’) when the body becomes a multiplicity. Like Deleuze and Guattari: I will not ask what a drug using body ‘means’ or signifies; but rather, what affects its assemblages produce and what flows of desire they cut off (its components and affects). I will then explore Deleuze and Guattari’s own particularly bleak conception of drug-use, arguing that the pessimism it engenders can be strategically sidestepped using Deleuze and Guattari’s other philosophical tools. I will explore how we might productively approach drug use via a Deleuzian ethics, and will argue for a specific ethical rethinking of drug use according to the concepts of the machinic assemblage and rhizomatic multiplicities. A strategy with implications not only for social policy, but also for how we understand ourselves. And who we might become. Subjectivity and the drug using body Bodies that fall prey to transcendence are reduced to what seems to persist across their alterations. Their very corporeality is stripped from them, in favor of a supposed substrate–soul, subjectivity, personality, identity–which in fact is no foundation at all, but an end effect, the infolding of a forcibly regularized outside. (Massumi, 1992: 112) For Deleuze and Guattari a body (human, animal, social, chemical) has no interior truth or meaning; it exists only through its external connections and affects. They write: We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body. (ATP5 : 257) So where does this leave the subject? And identity? If we are to talk only of the drug using body and its multiplicities–where does the ‘drug user’ or ‘addict’ disappear to? For Deleuze and Guattari the subject is nothing more (and nothing less) than a particular way in which bodies have become organised and stratified in the post-Enlightenment social world. In order to comprehend the ‘human’ body, the social world (or socius) reduces the complexity and chaos of an ever-changing multiplicity of bodily flux to discrete categories of meaning and constancy. Bodies become ordered and delimited according to hierarchical binary presuppositions: human/animal, man/woman, healthy/unhealthy, lawful/criminal, hetero/gay, clean/junkie. Binaries that bodies never fully correspond to: No real body ever entirely coincides with either category. A body only approaches its assigned category as a limit: it becomes more or less “feminine” or more or less “masculine” depending on the degree to which it conforms to the connections and trajectories laid out for it by society… “Man” and “Woman” as such have no reality other than that of logical abstraction. (Massumi, 1992: 86) Yet when bodies fall outside these binaries, or try to claim a different identity, they are rarely granted anything outside a third term (‘bi-sexual’, ‘reformedsmoker’) that remains reliant upon, and limited to, those binary relations. Multiplicities reduced to binaries and trinities. Manifold potential reduced to a discrete set of bodily possibilities. You will be a boy or a girl; a smoker or a non-smoker; a civilized human being (with all bodily parts fulfilling civilized ‘human’ functions)’ or an animal. Your choice. You will subscribe to modern selfhood (and all its bodily and linguistic demands) or you’ll be rejected: You will be organized, you will be an organism, you will articulate your body–otherwise you’re just depraved. You will be signifier and signified, interpreter and interpreted–otherwise you’re just a deviant. You will be a subject, nailed down as one, a subject of the enunciation recoiled into a subject of the statement–otherwise you’re just a tramp. (ATP: 159)

#### 4] Objective reality is inconclusive – quantum superposition allows for different experiences to exist simultaneously.

MIT ’19 (Emerging Technology from the arXiv archive page; Covers latest ideas from blog post about arXiv; 03/12/2019; “Emerging Technology from the arXiv archive page”; <https://www.technologyreview.com/2019/03/12/136684/a-quantum-experiment-suggests-theres-no-such-thing-as-objective-reality/>; *MIT Technology Review*; accessed: 11/19/2020; MohulA)

Back in 1961, the Nobel Prize–winning physicist Eugene Wigner outlined a thought experiment that demonstrated one of the lesser-known paradoxes of quantum mechanics. The experiment shows how the strange nature of the universe allows two observers—say, Wigner and Wigner’s friend—to experience different realities. Since then, physicists have used the “Wigner’s Friend” thought experiment to explore the nature of measurement and to argue over whether objective facts can exist. That’s important because scientists carry out experiments to establish objective facts. But if they experience different realities, the argument goes, how can they agree on what these facts might be? That’s provided some entertaining fodder for after-dinner conversation, but Wigner’s thought experiment has never been more than that—just a thought experiment. Last year, however, physicists noticed that recent advances in quantum technologies have made it possible to reproduce the Wigner’s Friend test in a real experiment. In other words, it ought to be possible to create different realities and compare them in the lab to find out whether they can be reconciled. And today, Massimiliano Proietti at Heriot-Watt University in Edinburgh and a few colleagues say they have performed this experiment for the first time: they have created different realities and compared them. Their conclusion is that Wigner was correct—these realities can be made irreconcilable so that it is impossible to agree on objective facts about an experiment. Wigner’s original thought experiment is straightforward in principle. It begins with a single polarized photon that, when measured, can have either a horizontal polarization or a vertical polarization. But before the measurement, according to the laws of quantum mechanics, the photon exists in both polarization states at the same time—a so-called superposition. Wigner imagined a friend in a different lab measuring the state of this photon and storing the result, while Wigner observed from afar. Wigner has no information about his friend’s measurement and so is forced to assume that the photon and the measurement of it are in a superposition of all possible outcomes of the experiment. Wigner can even perform an experiment to determine whether this superposition exists or not. This is a kind of interference experiment showing that the photon and the measurement are indeed in a superposition. From Wigner’s point of view, this is a “fact”—the superposition exists. And this fact suggests that a measurement cannot have taken place. But this is in stark contrast to the point of view of the friend, who has indeed measured the photon’s polarization and recorded it. The friend can even call Wigner and say the measurement has been done (provided the outcome is not revealed). So the two realities are at odds with each other. “This calls into question the objective status of the facts established by the two observers,” say Proietti and co. That’s the theory, but last year Caslav Brukner, at the University of Vienna in Austria, came up with a way to re-create the Wigner’s Friend experiment in the lab by means of techniques involving the entanglement of many particles at the same time. The breakthrough that Proietti and co have made is to carry this out. “In a state-of-the-art 6-photon experiment, we realize this extended Wigner’s friend scenario,” they say. They use these six entangled photons to create two alternate realities—one representing Wigner and one representing Wigner’s friend. Wigner’s friend measures the polarization of a photon and stores the result. Wigner then performs an interference measurement to determine if the measurement and the photon are in a superposition. The experiment produces an unambiguous result. It turns out that both realities can coexist even though they produce irreconcilable outcomes, just as Wigner predicted. That raises some fascinating questions that are forcing physicists to reconsider the nature of reality. The idea that observers can ultimately reconcile their measurements of some kind of fundamental reality is based on several assumptions. The first is that universal facts actually exist and that observers can agree on them. But there are other assumptions too. One is that observers have the freedom to make whatever observations they want. And another is that the choices one observer makes do not influence the choices other observers make—an assumption that physicists call locality. If there is an objective reality that everyone can agree on, then these assumptions all hold. But Proietti and co’s result suggests that objective reality does not exist. In other words, the experiment suggests that one or more of the assumptions—the idea that there is a reality we can agree on, the idea that we have freedom of choice, or the idea of locality—must be wrong. Of course, there is another way out for those hanging on to the conventional view of reality. This is that there is some other loophole that the experimenters have overlooked. Indeed, physicists have tried to close loopholes in similar experiments for years, although they concede that it may never be possible to close them all. Nevertheless, the work has important implications for the work of scientists. “The scientific method relies on facts, established through repeated measurements and agreed upon universally, independently of who observed them,” say Proietti and co. And yet in the same paper, they undermine this idea, perhaps fatally. The next step is to go further: to construct experiments creating increasingly bizarre alternate realities that cannot be reconciled. Where this will take us is anybody’s guess. But Wigner, and his friend, would surely not be surprised.

**This commits us to practical deliberation as the method of moral inquiry   
Serra 09**Juan Pablo Serra. What Is and What Should Pragmatic Ethics Be? Some Remarks on Recent Scholarship*.* EUROPEAN JOURNAL OF PRAGMATISM AND AMERICAN PHILOSOPHY. 2009. Francisco de Vitoria College, Humanities Department, Faculty member. https://journals.openedition.org/ejpap/905

This separation of theory and practice runs parallel to another split, namely, that of ethics and morals or, better put, of ethical theory and moral practice. Peirce denies that morality is subject to rationality and thinks that ethics is valuable as a science in a broad sense. But he also regards ethics as a science which bears on human conduct only indirectly, through the examination of past actions and the self-correction of the self in view of future action. In addition, ethics would be a normative knowledge only in so far as it analyzes the adjustment of actions to ends and in so far as it studies the general way in which a good life can be lived. In morals Peirce appeals to instinct and sentiment, and in ethics he recommends the use of logical thinking —just as scientists do. However, even within the framework of his system, it’s not obvious that scientists may so easily set aside their instincts —in fact, instinct (or ‘rational instinct’ as he called it in 1908) plays a significant role in the economy of re- search. Moreover, the statement that in moral issues there may be no possibility of carrying out an inquiry that is truth-oriented is not an uncontroversial one. After all, moral inquiry is performed in a deliberative way, weighing up argumentations, beliefs and principles, and comparing them either with their probable or conceivable consequences or with lived as well as possible experiences that can be forceful or impinge upon the deliberative subject in such a way as to acquire the compulsory resistance due to reality. As Misak puts it succint- ly, “the practice of moral deliberation is responsive to experience, reason, argument, and thought experiments... Such responsiveness is part of what it is to make a moral decision and part of what it is to try to live a moral life” (2000: 52)3. Likewise, this same deliberative activity implies an effort to acquire habits, beliefs and principles that contribute to a truly free deliberation which, in turn, can result in creative conclusions. For Peirce, as you get more habit-governed, you become more creative and free, and your selfhood acquires plas- ticity and receptiveness to experience4. Vincent Colapietro has referred to Peirce’s description of human reason in terms of a deliberative rationality (1999: 24). Also, in another place he has explained that deliberation for Peirce is a process of preparation for future action which has to do with the checking of previous acts, the rehearsal in imagination of different roads to be followed by possible conduct and the nurturing of ideals (Colapietro 1997: 270, 281). It is precisely this experi- ment carried out within imagination that generates habits, because, as Peirce says in “A Survey of Pragmaticism”, “it is not the muscular action but the accompanying inward ef- forts, the acts of imagination, that produce the habit” (CP 5.479, 1907). Habits are regular ways of thinking, perceiving and interpreting that generate actions. As such, habits have a huge influence on human behavior, manifest themselves in the con- crete things we do and, at the same time, are formed within those same activities. Even more, according to Peirce, the activity takes the form of experimentation in the inner world; and the conclusion (if it comes to a definite conclusion), is that under given conditions, the interpreter will have formed the habit of acting in a given way whenever he may desire a given kind of result. The real and living logical conclusion is that habit (CP 5.491, 1907). Much more evidence could be given to support the view that habits are virtually decided (CP 2.435, c.1893) and also that intelligence comprises inward or potential actions that in- fluence the formation of habits (CP 6.286, 1893). Suffice it to say that, according to Peirce, deliberation is a function of the imagination, and that imagination is in itself an experiment which may have unexpected consequences that impose themselves upon the deliberative subject.

#### Thus, the standard is consistency with pragmatic deliberation.

#### Impact Calc – deliberation is procedural, which means that agents ought to act in a deliberative fashion by employing the pragmatic procedure of deliberation, not the substance or conditions where deliberation can arise. To clarify, consequences are a sequencing question.

#### Prefer

#### 1] impacts cannot be isolated from their history and the only way to test the validity of truth is through application.

**Dewey 02** [John Dewey (head of the Philosophy Department at the University of Chicago). “The Evolutionary Method as Applied to Morality: II. Its Significance for Conduct.” The Philosophical Review, Vol. 11, No. 4 (Jul., 1902), pp. 353-371. Accessed 12/31/20. <https://www.jstor.org/stable/pdf/2176470.pdf> //Recut Xu]

The problem of the best method of arriving at correct judg- ments on points of moral worth, necessarily traverses ground covered by the time-honored and time-worn theories of intuition- alism and empiricism. Even at the risk of threshing old straw, it will be advisable to compare the evolutionary method with these other points of view. In such a comparison, however, it is to be borne in mind that the sole point under review is that of the log- ical relationship of the theory examined to the meaning and sanc- tion of our moral judgments. The question is not whether or no there are intuitions; whether or no they can be utilized in special cases, or whether or no all supposed intuitions can be accounted for as products of associative memory. The problem is not one of fact but of value. It is a logical problem. If we suppose such necessary and universal beliefs as go by the name of ' intuition' to exist, does such existence settle anything regarding the valid- ity of what is believed, either in general or in part? It is a question of the relation of the intuition to fact -to the moral order in reality. Under what conditions alone, and in what measure or degree, are we justified in arguing from the existence of moral intuitions as mental states and acts to facts taken to correspond to them ? The reply already hinted at is that the mere existence of a belief, even admitting that as a belief it cannot in any way be got rid of, determines absolutely nothing regarding the objectivity of its own content. The worth of the intuition depends upon genetic considerations. In so far as we can state the intuition in terms of the conditions of its origin, development, and later career, in so far we have some criterion for passing judgment upon its pretentions to validity. If we can find that the intuition is a legitimate response to enduring and deep-seated conditions, we have some reason to attribute worth to it. If we find that historically the belief has played a part in maintaining the integrity of social life, and in bringing new values into it, our belief in its worth is additionally guaranteed. But if we cannot find such historic origin and functioning, the intuition remains a mere state of consciousness, a hallucination, an illusion, which is not made more worthy by simply multiplying the number of people who have participated in it. Put roughly we may say that intuitionalism, asordinarily conceived, makes the ethical belief a brute fact, because unrelated. Its very lack of genetic relationship to the situation in which it appears condemns it to isolation. This isolation logically makes it impossible to credit it with objective validity. The intuitionalist, in proclaiming the necessity of his content, proclaims thereby its objective reference; but in asserting its non-genetic character he denies any reference whatsoever. The genetic theory holds that the content embodied in any so-called intuition is a response to a given active situation: that it arises, develops, and operates somehow in reference to this situation. This functional reference establishes in advance some kind of relationship to objective conditions, and hence some presumption of validity. If the ' intuition' persists, it is within certain limits because the situation persists. If the particular moral belief is really inexpugnable, it is just because the conditions which require it are so enduring as to persistently call out an attitude which is relevant to them. The probability is that it continues in existence simply because it continues to be necessary in function.

#### 2] Pluralistic Materialism – other theories rely on minimalistic criteria; our framework understands knowledge as changing and uses experience to base social change and revise ideas. Glaude 7Eddie S. (Eddie S. Glaude Jr. is the African-American chair of the Center for African-American Studies and the William S. Tod Professor of Religion and African-American Studies at Princeton University.) In a Shade of Blue : Pragmatism and the Politics of Black America. University of Chicago Press, 2007. EBSCOhost. (5-7)

In a Shade of Blue is my contribution to the tradition I have just sketched. My aim is to think through some of the more pressing conceptual problems confronting African American political life, and I do so as a Deweyan prag-matist. I should say a bit about what I mean by this self-description. John Dewey thought of philosophy as a form of cultural and social criticism. He held the view that philosophy, properly understood as a mode of wis-dom, ought to aid us in our efforts to overcome problematic situations and worrisome circumstances. The principal charge of the philosopher, then, is to deal with the problems of human beings, not simply with the problems of philosophers. For Dewey, over the course of his long career, this involved bridging the divide between science, broadly understood, and morals—a divide he traced to a conception of experience that has led philosophers over the centuries to tilt after windmills. Dewey declared, “The problem of restoring integration and co-operation between man’s beliefs about the world in which he lives and his beliefs about values and purposes that should direct his conduct is the deepest problem of any philosophy that is not isolated from life.”9Dewey bases this conclusion on several features of his philosophy: (1) anti foundationalism, (2) experimentalism, (3) contextualism, and (4) soli-darity.10 Antifoundationalism, of course, is the rejection of foundations of knowledge that are beyond question. Dewey, by contrast, understands knowledge to be the fruit of our undertakings as we seek “the enrichment of our immediate experience through the control over action it exercises.”11He insists that we turn our attention from supposed givens to actual consequences, pursuing a future fundamentally grounded in values shaped by experience and realized in our actions. This view makes clear the experimental function of knowledge. Dewey emphasized that knowledge entails efforts to control and select future experience and that we are always con-fronted with the possibility of error when we act. We experiment or tinker, with the understanding that all facts are fallible and, as such, occasionally afford us the opportunity for revision.12Contextualism refers to an understanding of beliefs, choices, and actions as historically conditioned. Dewey held the view that inquiry, or the pursuit of knowledge, is value-laden, in the sense that we come to problems with interests and habits that orient us one way or another, and that such pursuits are also situational, in the sense that “knowledge is pursued and produced somewhere, some when, and by someone.”13Finally, solidarity captures the associational and cooperative dimensions of Dewey’s thinking. Dewey conceives of his pragmatism as “an instrument of social improvement” aimed principally at expanding democratic life and broadening the ground of individual self-development.14Democracy, for him, constitutes more than a body of formal procedures; it is a form of life that requires constant attention if we are to secure the ideals that purportedly animate it. Individuality is understood as developing one’s unique capacities within the context of one’s social relations and one’s community. The formation of the democratic character so important to our form of associated living involves, then, a caring disposition toward the plight of our fellows and a watchful concern for the well-being of our democratic life.

#### 3] Performativity- when you enter debate, you presume that you can discuss the topic because of deliberation. This means denial of my framework is impossible and all objections should be ignored on face because responding to my framework requires my framework to do so.

#### 4] Only prag utilizes a domain of discourse that resolves linguistic ambiguity and propositional truth.

Wikipedia ND [“Domain of discourse”. Wikipedia. No Date. Accessed 1/9/22. <https://en.wikipedia.org/wiki/Domain_of_discourse> //Xu]

For example, in an interpretation of first-order logic, the domain of discourse is the set of individuals over which the quantifiers range. A proposition such as ∀x (x2 ≠ 2) is ambiguous, if no domain of discourse has been identified. In one interpretation, the domain of discourse could be the set of real numbers; in another interpretation, it could be the set of natural numbers. If the domain of discourse is the set of real numbers, the proposition is false, with x = √2 as counterexample; if the domain is the set of natural numbers, the proposition is true, since 2 is not the square of any natural number. Universe of discourse The term "universe of discourse" generally refers to the collection of objects being discussed in a specific discourse. In model-theoretical semantics, a universe of discourse is the set of entities that a model is based on. The concept universe of discourse is generally attributed to Augustus De Morgan (1846) but the name was used for the first time by George Boole (1854) on page 42 of his Laws of Thought. Boole's definition is quoted below. The concept, probably discovered independently by Boole in 1847, played a crucial role in his philosophy of logic especially in his principle of wholistic reference. Boole’s 1854 definition In every discourse, whether of the mind conversing with its own thoughts, or of the individual in his intercourse with others, there is an assumed or expressed limit within which the subjects of its operation are confined. The most unfettered discourse is that in which the words we use are understood in the widest possible application, and for them the limits of discourse are co-extensive with those of the universe itself. But more usually we confine ourselves to a less spacious field. Sometimes, in discoursing of men we imply (without expressing the limitation) that it is of men only under certain circumstances and conditions that we speak, as of civilized men, or of men in the vigour of life, or of men under some other condition or relation. Now, whatever may be the extent of the field within which all the objects of our discourse are found, that field may properly be termed the universe of discourse. Furthermore, this universe of discourse is in the strictest sense the ultimate subject of the discourse. — George Boole, The Laws of Thought. 1854/2003. p. 42.

#### 5] Governmental action necessitates public deliberation of affected citizens.

**Christman 15** [Bracketed for Clarity. John Christman (Professor of Philosophy, Political Science, and Women's Studies at Penn State University). “Autonomy in Moral and Political Philosophy.” Stanford Encyclopedia of Philosophy. First published Mon Jul 28, 2003; substantive revision Fri Jan 9, 2015. Accessed 6/12/20. <https://plato.stanford.edu/entries/autonomy-moral/> //Xu]

In closing, we should add a word about the implications of political liberalism for the traditional division between liberal justice and democratic theory. I say “division” here, but different views of justice and democracy will convey very different conceptions of the relation between the two (see Christiano 1996, Lakoff 1996). But traditionally, liberal conceptions of justice have viewed democratic mechanisms of collective choice as essential but highly circumscribed by the constitutional provisions that principles of justice support. Individual rights and freedoms, equality before the law, and various privileges and protections associated with citizen autonomy are protected by principles of justice and hence not subject to democratic review, on this approach (Gutmann 1993). However, liberal conceptions of justice have themselves evolved (in some strains at least) to include reference to collective discussion and debate (public reason) among the constitutive conditions of legitimacy. It could be claimed, then, that basic assumptions about citizens' capacities for reflective deliberation and choice — autonomy — must be part of the background conditions against which an overlapping consensus or other sort of political agreement concerning principles of justice is to operate. Some thinkers have made the connection between individual or “private” autonomy and collective or “public” legitimacy — prominent, most notably Habermas (Habermas 1994). On this view, legitimacy and justice cannot be established in advance through philosophical construction and argument, as was thought to be the case in natural law traditions in which classical social contract theory flourished and which is inherited (in different form) in contemporary perfectionist liberal views. Rather, justice amounts to that set of principles that are established in practice and rendered legitimate by the actual support of affected citizens (and their representatives) in a process of collective discourse and deliberation (see e.g., Fraser 1997, 11–40 and Young 2000). Systems of rights and protections (private, individual autonomy) will necessarily be protected in order to institutionalize frameworks of public deliberation (and, more specifically, legislation and constitutional interpretation) that render principles of social justice acceptable to all affected (in consultation with others) (Habermas 1994, 111). This view of justice, if at all acceptable, provides an indirect defense of the protection of autonomy and, in particular, conceptualizing autonomy in a way that assumes reflective self- evaluation. For only if citizen participants in the public discourse that underlies justice are assumed to have (and provided the basic resources for having) capacities for competent self- reflection, can the public defense and discussion of competing conceptions of justice take place (cf. Gaus 1996, Parts II and III, Gaus 2011). Insofar as autonomy is necessary for a functioning democracy (considered very broadly), and the latter is a constitutive element of just political institutions, then autonomy must be seen as reflective self-appraisal (and, I would add, non-alienation from central aspects of one's person) (see Cohen 2002, Richardson 2003). This approach to justice and autonomy, spelled out here in rough and general form, has certainly faced criticism. In particular, those theorists concerned with the multi-dimensional nature of social and cultural “difference” have stressed how the conception of the autonomous person assumed in such principles (as well as criteria for rational discourse and public deliberation) is a contestable ideal not internalized by all participants in contemporary political life (see, e.g., Brown 1995, Benhabib 1992). Others motivated by post-modern considerations concerning the nature of the self, rationality, language, and identity, are also suspicious of the manner in which the basic concepts operative in liberal theories of justice (“autonomy” for example) are understood as fixed, transparent, and without their own political presuppositions (see, e.g., Butler 1990; for general discussion see White 1990). These charges are stated here much too generally to give an adequate response in this context. But the challenge remains for any theory of justice which rests on a presumption of the normative centrality of autonomy. To be plausible in a variously pluralistic social setting, such a view must avoid the twin evils of forcibly imposing a (reasonably) contested value on resistant citizens, on the one hand, and simply abandoning all normative conceptions of social order in favor of open ended struggle for power on the other. The view that individuals ought to be treated as, and given the resources to become, autonomous in one of the minimal senses outlined here will, I submit, be a central element in any political view that steers between the Scylla of oppressive forms of perfectionism and the Charybdis of interest-group power politics.

### Offense

#### I affirm Resolved: The appropriation of outer space by private entities is unjust. Spec and definitions in doc

The – “used to point forward to a following qualifying or defining clause or phrase”. Google. <https://www.google.com/search?q=the+definition&rlz=1C1CHBF_enUS877US877&oq=the+definition&aqs=chrome.0.69i59j69i64j69i61j69i60l2.2103j0j7&sourceid=chrome&ie=UTF-8>

Appropriation – “an act or instance of appropriating something”. <https://www.merriam-webster.com/dictionary/appropriation>

Of – “indicating an association between two entities, typically one of belonging”. <https://www.google.com/search?q=of+definition&rlz=1C1CHBF_enUS877US877&oq=of+definition&aqs=chrome..69i57j69i60.1494j0j7&sourceid=chrome&ie=UTF-8>

Outer Space – “the physical universe beyond the earth's atmosphere”. <https://www.google.com/search?q=outer+space+definition&rlz=1C1CHBF_enUS877US877&oq=outer+space+definition&aqs=chrome..69i57j69i60.2363j0j7&sourceid=chrome&ie=UTF-8>

By – “identifying the agent performing an action.”. <https://www.google.com/search?q=by+definition&rlz=1C1CHBF_enUS877US877&oq=by+definition&aqs=chrome.0.69i59.1433j0j7&sourceid=chrome&ie=UTF-8>

Private Entity – “(A) In general Except as otherwise provided in this paragraph, the term “private entity” means any person or private group, organization, proprietorship, partnership, trust, cooperative, corporation, or other commercial or nonprofit entity, including an officer, employee, or agent thereof.”. <https://www.law.cornell.edu/definitions/uscode.php?width=840&height=800&iframe=true&def_id=6-USC-625312480-168358316&term_occur=999&term_src=title:6:chapter:6:subchapter:I:section:1501>

Unjust – “not morally right; not fair”. <https://dictionary.cambridge.org/us/dictionary/english/unjust>

#### The aff identifies appropriation as unjust

Webster ND Definition of IS," Merriam Webster, <https://www.merriam-webster.com/dictionary/is> IS

is Definition of is (Entry 1 of 4) present tense third-person singular of BE dialectal present tense first-person and third-person singular of BE dialectal present tense plural of BE

#### Dialectical present tense means logical coherence which implies no implementation

Your Dictionary ND, , "Dialectical Meaning," No Publication, <https://www.yourdictionary.com/dialectical> Cho

The definition of dialectical is a discussion that includes logical reasoning and dialogue, or something having the sounds, vocabulary and grammar of a specific way of speaking. An example of something dialectical is a Lincoln Douglass style of debate, where both parties argue a point in a logical order. Of, or pertaining to dialectic; logically reasoned through the exchange of opposing ideas.

#### “BE” is a linking verb, not an action verb so implementation is incoherent

Grammar Monster ND "Linking Verbs," Grammar Monster, <https://www.grammar-monster.com/glossary/linking_verbs.htm> CHO

What Are Linking Verbs? (with Examples) A linking verb is used to re-identify or to describe its subject. A linking verb is called a linking verb because it links the subject to a subject complement (see graphic below). Infographic Explaining Linking Verb A linking verb tells us what the subject is, not what the subject is doing. Easy Examples of Linking Verbs In each example, the linking verb is highlighted and the subject is bold. Alan is a vampire. (Here, the subject is re-identified as a vampire.) Alan is thirsty. (Here, the subject is described as thirsty.)

A picture containing text, sign

Description automatically generated



#### 1] The appropriation of space by private entities isn’t value neutral but is sutured in a discourse of the cosmic elite and unequal IR.

Stockwell 20 [Samuel Stockwell (Research Project Manager, the Annenberg Institute at Brown University). “Legal ‘Black Holes’ in Outer Space: The Regulation of Private Space Companies”. E-International Relations. Jul 20 2020. Accessed 12/7/21. <https://www.e-ir.info/2020/07/20/legal-black-holes-in-outer-space-the-regulation-of-private-space-companies/> //Xu]

The US government’s support for private space companies is also likely to lead to the reinforcement of Earth-bound wealth inequalities in space. Many NewSpace actors frame their long-term ambitions in space with strong anthropogenic undertones, by offering the salvation of the human race from impending extinction through off-world colonial developments (Kearnes & Dooren: 2017: 182). Yet, this type of discourse disguises the highly exclusive nature of these missions. Whilst they seem to suggest that there is a stake for ordinary citizens in the vast space frontier, the reality is that these self-described space pioneers are a member of a narrow ‘cosmic elite’ – “founders of Amazon.com, Microsoft, Pay Pal… and a smattering of games designers and hotel magnates” (Parker, 2009: 91). Indeed, private space enterprises have themselves suggested that they have no obligation to share mineral resources extracted in space with the global community (Klinger, 2017: 208). This is reflected in the speeches of individuals such as Nathan Ingraham, a senior editor at the tech site EngadAsteroid mining, who claimed that asteroid mining was “how [America is] going to move into space and develop the next Vegas Strip” (Shaer, 2016: 50). Such comments highlight a form of what Beery (2016) defines as ‘scalar politics’. In similar ways to the ‘scaling’ of unequal international relations that has constituted our relationship with outer space under the guise of the ‘global commons’ (Beery, 2016: 99), private companies – through their anthropogenic discourse – are scaling existing Earth-bound wealth inequalities and social relations into space by siphoning off extra-terrestrial resources. By constructing their endeavours in ways that appeal to the common good, NewSpace actors are therefore concealing the reality of how commercial resource extraction serves the exclusive interests of their private shareholders at the expense of the vast majority of the global population.

#### 2] Appropriation intrinsically guts deliberative procedures since it denies the owner’s permission for property rights, blocking one possible experience/form of communication from other groups since it guts communal approaches

Oxford. Lexico. Appropriation. https://www.lexico.com/en/definition/appropriation

the action of taking something for one's own use, typically without the owner's permission.

### Method

#### 1] 1AR theory is legit – anything else means infinite abuse

#### – drop the debater – 1AR is too short to make up for the time trade-off

#### – no RVIs – 6 min 2NR means they can brute force me every time

#### – competing interps – reasonability narrows the theory debate to one issue of brightline, making it easy for the Neg to collapse to the issue in the long 2NR

#### – 1AR theory is the highest layer – the NC has 7 minutes to be abusive and 6 minutes to leverage the abuse against 1A theory in the 2N, making checking abuse lexically impossible

#### 2] Give me new weighing in the 2AR for 1AR shells – I don’t know what arguments will be read in the 2NR so 1AR weighing is impossible as I don’t know what to weigh against.

#### 3] Affirm if I win offense to a counterinterp

#### A] Timeskew – 6 Minute 2NR with collapse to whatever I undercover means that you can win theory and substance, but I need to go for both in half the time and split it between the 2 layers.

#### B] Reciprocity – you get T and theory so I should get theory and an RVI to make the burden reciprocal.

#### 4] Nothing has triggered it, but presumption and permissibility affirm

#### a) We always default to assuming something true until proven false ie if I told you my name is Daniel you would believe me

#### b) Unjust[[1]](#footnote-1) is “not morally right; not fair” and permissibility disproves the positive obligation which is aff ground

#### c) empirics

Shah 19 Sachin “A STATISTICAL ANALYSIS OF SIDE-BIAS ON THE 2019 JANUARY-FEBRUARY LINCOLN-DOUGLAS DEBATE TOPIC” NSD, 15 February 2019. <http://nsdupdate.com/2019/a-statistical-analysis-of-side-bias-on-the-2019-january-february-lincoln-douglas-debate-topic/> SJCP//JG

To further quantify the side-bias, the proportion of negative wins when the affirmative was favored (p1) can be compared with the proportion of affirmative wins when the negative is favored (p2). Ideally the difference between the proportions would be 0; however, p1 = 34.84% while p2 = 28.77, a staggering 6.07% difference. Now the question is whether this difference is statistically significant. In order to determine the answer, a two-proportion z-test was used. The null hypothesis is p1 – p2 = 0 , because that means both sides are able to overcome the debating level skew equally. The alternative hypothesis is then p1 – p2 > 0, meaning the negative is able to overcome the skew more than the affirmative is able, demonstrating a side-bias. This two-proportion z-test rejected the null hypothesis in favor of the alternative (p-value < 0.0001). There is sufficient evidence that the negative is able to overcome the skew more often than the affirmative can. This implies there is a less than 0.01% chance that there is no side-bias because it demonstrates the higher proportion of negative wins when the affirmative is favored is significant. In short, the negative has a greater ability to win difficult rounds than the affirmative does, which indicates there exists a skew in the negative’s favor. This analysis is statistically rigorous and relevant in several aspects: (A) The p-value is less than the alpha. (B) The data is on the current January-February topic, meaning it’s relevant to rounds these months [2]. (C) The data represents a diversity of debating and judging styles across the country. (D) This analysis accounts for disparities in debating skill level. (E) Type I error was reduced by choosing a small alpha level. The combination of these points validates this analysis. As a final note, it is also interesting to look at the trend over multiple topics. In the rounds from 93 TOC bid distributing tournaments (2017 – 2019 YTD), the negative won 52.99% of ballots (p-value < 0.0001) and 54.63% of upset rounds (p-value < 0.0001). This suggests the bias might be structural, and not topic specific, as this data spans six different topics. Therefore, this analysis confirms that affirming is in fact harder again on the 2019 January-February topic [3]. So don’t lose the flip!

### Adv

#### Commercial Space Industry requires an enormous increase in launches – that causes pollutants and warming.

Gammon 21 Katharine Gammon 7-19-2021 "How the billionaire space race could be one giant leap for pollution" <https://www.theguardian.com/science/2021/jul/19/billionaires-space-tourism-environment-emissions> (I’m an award-winning independent science journalist based in Santa Monica, California. My interests range from culture and nature in public lands to the lives of scientists to the complexity of baby brains. Before I became a professional journalist, I served in the Peace Corps in Bulgaria, and attended MIT and Princeton University.)//Elmer

Last week Virgin Galactic took Richard Branson past the edge of space, roughly 86 km up – part of a new space race with the Amazon billionaire Jeff Bezos, who aims to make a similar journey on Tuesday. Both very wealthy businessmen hope to vastly expand the number of people in space. “We’re here to make space more accessible to all,” said Branson, shortly after his flight. “Welcome to the dawn of a new space age.” Already, people are buying tickets to space. Companies including SpaceX, Virgin Galactic and Space Adventures want to make space tourism more common. The Japanese billionaire Yusaku Maezawa spent an undisclosed sum of money with SpaceX in 2018 for a possible future private trip around the moon and back. And this June, an anonymous space lover paid $28m to fly on Blue Origin’s New Shepard with Bezos – though later backed out due to a “scheduling conflict”. But this launch of a new private space industry that is cultivating tourism and popular use could come with vast environmental costs, says Eloise Marais, an associate professor of physical geography at University College London. Marais studies the impact of fuels and industries on the atmosphere. When rockets launch into space, they require a huge amount of propellants to make it out of the Earth’s atmosphere. For SpaceX’s Falcon 9 rocket, it is kerosene, and for Nasa it is liquid hydrogen in their new Space Launch System. Those fuels emit a variety of substances into the atmosphere, including carbon dioxide, water, chlorine and other chemicals. The carbon emissions from rockets are small compared with the aircraft industry, she says. But they are increasing at nearly 5.6% a year, and Marais has been running a simulation for a decade, to figure out at what point will they compete with traditional sources we are familiar with. “For one long-haul plane flight it’s one to three tons of carbon dioxide [per passenger],” says Marais. For one rocket launch 200-300 tonnes of carbon dioxide are split between 4 or so passengers, according to Marais. “So it doesn’t need to grow that much more to compete with other sources.” Right now, the number of rocket flights is very small: in the whole of 2020, for instance, there were 114 attempted orbital launches in the world, according to Nasa. That compares with the airline industry’s more than 100,000 flights each day on average. But emissions from rockets are emitted right into the upper atmosphere, which means they stay there for a long time: two to three years. Even water injected into the upper atmosphere – where it can form clouds – can have warming impacts, says Marais. “Even something as seemingly innocuous as water can have an impact.” Closer to the ground, all fuels emit huge amounts of heat, which can add ozone to the troposphere, where it acts like a greenhouse gas and retains heat. In addition to carbon dioxide, fuels like kerosene and methane also produce soot. And in the upper atmosphere, the ozone layer can be destroyed by the combination of elements from burning fuels. “While there are a number of environmental impacts resulting from the launch of space vehicles, the depletion of stratospheric ozone is the most studied and most immediately concerning,” wrote Jessica Dallas, a senior policy adviser at the New Zealand Space Agency, in an analysis of research on space launch emissions published last year. Another report from 2019 penned by the Center for Space Policy and Strategy likened the space emissions problem to that of space debris, which the authors say creates an existential risk to the industry. “Today, launch vehicle emissions present a distinctive echo of the space debris problem. Rocket engine exhaust emitted into the stratosphere during ascent to orbit adversely impacts the global atmosphere,” they wrote. “We just don’t know how large the space tourism industry could become,” says Marais. A new market report estimates that the global suborbital transportation and space tourism market is estimated to reach $2.58bn in 2031, growing 17.15% each year of the next decade. “The major driving factor for the market’s robustness will be focused efforts to enable space transportation, emerging startups in suborbital transportation, and increasing developments in low-cost launching sites,” the report says. In the past, most space transportation has been focused on cargo supply missions to the International Space Station and satellite launch services, but currently, this focus has shifted to in-space transportation, planetary explorations, crewed missions, suborbital transportation and space tourism. Several companies, including SpaceX, Blue Origin and Virgin Galactic, have been focusing on developing platforms such as rocket-powered suborbital vehicles that will enable the industry to carry out suborbital transportation and space tourism. People have pointed out that the money these billionaires have poured into space technology could be invested in making life better on our planet, where wildfires, heatwaves and other climate disasters are becoming more frequent as the globe warms up in the climate crisis. “Is anyone else alarmed that billionaires are having their own private space race while record-breaking heatwaves are sparking a ‘fire-breathing dragon of clouds’ and cooking sea creatures to death in their shells?” the former US Labor Secretary Robert Reich tweeted last week. Marais says that there is always an element of excitement to new developments in space – but it’s still possible to be responsible while doing something exciting. She urges caution as the space tourism industry grows, and says there are currently no international rules around the kinds of fuels used and their impact on the environment. “We have no regulations currently around rocket emissions,” she says. “The time to act is now – while the billionaires are still buying their tickets.”

#### Status Quo Launches are goldilocks, but Commercialization increases it ten-fold which overwhelms alt-causes – specifically decks the Ozone Layer.

Marais 21 Eloise Marais 7-19-2021 "Space tourism: rockets emit 100 times more CO₂ per passenger than flights – imagine a whole industry" <https://theconversation.com/space-tourism-rockets-emit-100-times-more-co-per-passenger-than-flights-imagine-a-whole-industry-164601> (Associate Professor in Physical Geography, UCL)//Elmer

The commercial race to get tourists to space is heating up between Virgin Group founder Sir Richard Branson and former Amazon CEO Jeff Bezos. On Sunday 11 July, Branson ascended 80 km to reach the edge of space in his piloted Virgin Galactic VSS Unity spaceplane. Bezos’ autonomous Blue Origin rocket is due to launch on July 20, coinciding with the anniversary of the Apollo 11 Moon landing. Though Bezos loses to Branson in time, he is set to reach higher altitudes (about 120 km). The launch will demonstrate his offering to very wealthy tourists: the opportunity to truly reach outer space. Both tour packages will provide passengers with a brief ten-minute frolic in zero gravity and glimpses of Earth from space. Not to be outdone, Elon Musk’s SpaceX will provide four to five days of orbital travel with its Crew Dragon capsule later in 2021. What are the environmental consequences of a space tourism industry likely to be? Bezos boasts his Blue Origin rockets are greener than Branson’s VSS Unity. The Blue Engine 3 (BE-3) will launch Bezos, his brother and two guests into space using liquid hydrogen and liquid oxygen propellants. VSS Unity used a hybrid propellant comprised of a solid carbon-based fuel, hydroxyl-terminated polybutadiene (HTPB), and a liquid oxidant, nitrous oxide (laughing gas). The SpaceX Falcon series of reusable rockets will propel the Crew Dragon into orbit using liquid kerosene and liquid oxygen. Burning these propellants provides the energy needed to launch rockets into space while also generating greenhouse gases and air pollutants. Large quantities of water vapour are produced by burning the BE-3 propellant, while combustion of both the VSS Unity and Falcon fuels produces CO₂, soot and some water vapour. The nitrogen-based oxidant used by VSS Unity also generates nitrogen oxides, compounds that contribute to air pollution closer to Earth. Roughly two-thirds of the propellant exhaust is released into the stratosphere (12 km-50 km) and mesosphere (50 km-85 km), where it can persist for at least two to three years. The very high temperatures during launch and re-entry (when the protective heat shields of the returning crafts burn up) also convert stable nitrogen in the air into reactive nitrogen oxides. These gases and particles have many negative effects on the atmosphere. In the stratosphere, nitrogen oxides and chemicals formed from the breakdown of water vapour convert ozone into oxygen, depleting the ozone layer which guards life on Earth against harmful UV radiation. Water vapour also produces stratospheric clouds that provide a surface for this reaction to occur at a faster pace than it otherwise would. Space tourism and climate change Exhaust emissions of CO₂ and soot trap heat in the atmosphere, contributing to global warming. Cooling of the atmosphere can also occur, as clouds formed from the emitted water vapour reflect incoming sunlight back to space. A depleted ozone layer would also absorb less incoming sunlight, and so heat the stratosphere less. Figuring out the overall effect of rocket launches on the atmosphere will require detailed modelling, in order to account for these complex processes and the persistence of these pollutants in the upper atmosphere. Equally important is a clear understanding of how the space tourism industry will develop. Virgin Galactic anticipates it will offer 400 spaceflights each year to the privileged few who can afford them. Blue Origin and SpaceX have yet to announce their plans. But globally, rocket launches wouldn’t need to increase by much from the current 100 or so performed each year to induce harmful effects that are competitive with other sources, like ozone-depleting chlorofluorocarbons (CFCs), and CO₂ from aircraft. During launch, rockets can emit between four and ten times more nitrogen oxides than Drax, the largest thermal power plant in the UK, over the same period. CO₂ emissions for the four or so tourists on a space flight will be between 50 and 100 times more than the one to three tonnes per passenger on a long-haul flight. In order for international regulators to keep up with this nascent industry and control its pollution properly, scientists need a better understanding of the effect these billionaire astronauts will have on our planet’s atmosphere.

#### unregulated commercialization triples debris and renders satellites unusable.

Chris Fabian, who has a Master’s of Science from the University of North Dakota, writes that (Christopher; January 2019; B.S. from the United States Air Force Academy, thesis submitted in partial fulfillment of the requirements for a M.S. from the University of North Dakota, approved by the Faculty Advisory Committee and in coordination with Dr. Michael Dodge, David Kugler, and Brian Urlacher; University of North Dakota Scholarly Commons, “A Neoclassical Realist’s Analysis Of Sino-U.S. Space Policy,” <https://commons.und.edu/theses/2455/>)

b. Defect/Defect The ubiquity of space technology has also yielded the negative externality of overcrowding the space domain. Despite its seemingly unlimited size, there are a limited number of useful earth-centric orbits to optimize terrestrial coverage. It is projected that there are over 300,000 medium sized objects capable of causing catastrophic failure of a satellite upon collision currently in earth’s orbit.159 Of these objects, 20,000 are actively tracked by the comparatively robust space surveillance network (SSN) of the United States Air Force, only 1,000 are active payloads, and even fewer have maneuver capability.160 Recent trends indicate that the problem of orbital congestion will only worsen in the coming decades as the barriers to entry are reduced. Launch service cost is rapidly decreasing due to an increased number of service providers and technology revolutions such as reusable rockets. Also, the miniaturization and simplification of satellite payloads further reduces the cost and infrastructure needed to be a spacefairing nation.161 This is evidenced by the near doubling of state operated satellites from 27 in 2000 to over 50 in 2012, coupled with a near doubling in total space objects from 1997 to 2007.162 The accumulation of space debris is a vital concern to the sustainable development of the space environment due to the increased probability of conjunction between active payloads and all other objects that results from crowded orbits. This increase in collision probability occurs proportionally to the number of objects in a given orbital domain. The tripling of orbital debris projected to occur in the next century, due to routine use and accumulation alone, would cause a tenfold increase in the probability of collision. In the event of a catastrophic collision between two objects, the resulting debris cloud could cause a cascading effect. Each successive collision increases the probability of another occurrence in a given orbit until an instability threshold is reached. At this threshold, debris removal due to decay would be negligible compared to debris created by subsequent collisions. As the propagation of debris continues, the cost of launching a satellite would eventually outweigh the benefits received due to the probability of that asset being destroyed by errant debris, effectively rendering the given orbit unusable. This debris propagation model and the dangers associated with it are colloquially referred to as the Kessler Syndrome. Kessler asserts unstable regions of low earth orbit (LEO) currently exist and that, barring the addition of more debris, a major collision would occur once every 10-20 years. If debris doubles, as it has in the last decade, the collision rate would increase to 2.5 years. Although most models’ time scales are on the order of centuries, it is widely accepted that the current rate of debris accumulation will render critical orbits unusable unless immediate measures are taken to return stability.163 There is near universal acceptance of the danger space debris presents, yet little substantive action has been taken to solve the problem. Current debris accumulation and propagation models show that earth orbiting domains are finite resources. Continued unsustainable development moving forward may preclude future usage, making earth orbits rivalrous goods.164 Furthermore, orbital domains are made a non-excludable good by the OST which states, “Outer space… shall be free for exploration and use by all States without discrimination of any kind.”165 As a non-excludable public good, space succumbs to the tragedy of the commons where the privately beneficial strategy of space utilization differs significantly from the socially optimal strategy promoting orbital stability.166 Understandably, most analysis has focused on solving the problem of orbital instability by addressing the market failure responsible for debris creation. The current reasoning suggests that if actors creating space debris internalize the cost of their actions, a solution can arise. Proposed solutions run the gamut of ideologies from free market tax incentives, to command and control legislation, to restructuring orbital property rights. Scientific solutions have also been proposed, but technological feasibility and cost remain major problems. Furthermore, analogous environments susceptible to the tragedy of the commons have been examined in hopes that they may prove applicable to the problem of orbit instability.167 This analysis is ultimately useful if the problem is to be solved under nominal conditions, but there is an underlying problem that needs to be addressed before any of these proposed solutions can realistically be enacted.

#### Debris causes ecological destruction because of environmental contamination.

Samuel Stockwell, a Research Manager at Brown University, writes in 2020 that [Samuel Stockwell (Research Project Manager, the Annenberg Institute at Brown University). “Legal ‘Black Holes’ in Outer Space: The Regulation of Private Space Companies”. E-International Relations. Jul 20 2020. Accessed 12/7/21. <https://www.e-ir.info/2020/07/20/legal-black-holes-in-outer-space-the-regulation-of-private-space-companies/> //Xu]

Space debris can be defined as non-purposeful man-made objects that reside in space; made up of inactive parts from former space operations and fragmentations of spacecraft, there are nearly 30,000 pieces of debris in the Earth’s orbit (Pellegrino & Stang, 2016: 25). Despite most debris being centimetres or millimetres in size satellites often travel at the speed of a bullet, meaning that a collision between the two could be catastrophic in terms of environmental, mechanical and financial damage (Black & Butt, 2010: 1). Since the development of the Kessler Syndrome thesis in 1978 – which predicted that space debris may become so dense as to trigger a chain reaction of major collisions – space debris is considered more of a threat to security operations in the near-term than military space activity (Quintana, 2017: 95). Difficulty over determining whether a collision was accidental or a purposeful act further exacerbates this problem, given that “every object in orbit is a threat to everything else in orbit, regardless of its intended function” (Faith, 2012: 86). Such developments have led to the US administration increasingly adopting a securitisation discourse around orbital debris (Bowen, 2014: 47), which may cause concerns as to whether policymakers may react to future American satellite collisions in a militarised manner. A number of NewSpace actors are likely to complicate these worries even further through recent satellite proposals. Whilst Boeing is proposing a constellation of up to 3,000 satellites, SpaceX has even grander goals of creating a constellation consisting of 4,425 satellites, eventually expanding to 12,000 satellites in the near-future (Kosiak, 2019: 7). Putting this into context, there are currently just around 1,400 active satellites in orbit around the Earth, highlighting the scale of these projects. The collision between a single US privately-owned Iridium satellite and state-owned Russian Cosmos satellite in 2009 underscored not only the sheer amount of debris caused by these collisions – over 1,500 pieces – but also foreshadowed the possible geopolitical tensions that may arise from them (Wang, 2010: 87-88). Given the number of various commercial satellite constellations possibly going into orbit in the near-future, this raises questions over the possibly devastating security hazards they could pose once in orbit or when they eventually become defunct. Yet the proliferation of these commercial satellite plansalso pose significant environmental issues. Article IX of the OST asserts that: “States shall pursue activities of outer space in a manner that avoids any harmful contamination or adverse environmental changes on Earth” (UN, 1967). However, the use of terms like ‘harmful’ or ‘adverse change’ underscores the lack of specificity over what exactly constitutes environmental damage, or for whom it must refrain from harming. There is also a failure to address the explicit problem of space debris since the discourse is primarily concentrated on chemical effluent pollution, undermining attempts to facilitate the removal of floating wreckage(Gupta, 2016: 26). The inability of the OST to properly promote environmental considerations in space has been mirrored in the NewSpace community, where there has been a woeful lack of ecological consideration: “The hundreds of articles and books on outer space resource development seldom mention that such actions may adversely affect the environment in ways that will potentially disadvantage their enterprises and the humans that will be required to implement them” (Kramer, 2017: 136). Such images evoke the types of difficulties that private firms have encountered on Earth reconciling capital with the environment in a way that doesn’t damage profit margins (Magdoff & Foster, 2011: 61-66). Yet in doing so, this neglect is only likely to result in the proliferation of extra-terrestrial debris that the UN OST failed to address. Indeed, despite its vastness there is only a narrow region of orbital space that is either useable or beneficial for prolonged human missions (Brearley, 2005: 2), meaning that the increase in space debris from these massive commercial satellite constellations will likely be at the detriment of developing nations who have yet fostered spacefaring capabilities. Elon Musk’s SpaceX company has already caused complications for Earth-bound astrologists. The brightness of his recent ‘Starlink’ satellite constellation system in comparison to other satellites has been obscuring telescopic images (see Grush, 2020). More concerningly, Starlink may be much more visible during twilight hours which could be problematic in identifying potentially hazardous asteroids in a timely manner (The Verge, 2020). In this sense, whilst private space entrepreneurs are able to increase their profitability from being able to establish constellations, such endeavours are spoiling the scientific work of researchers on Earth that may complicate the monitoring of Earth-based asteroid impacts.

#### Warming causes Extinction

Kareiva 18, Peter, and Valerie Carranza. "Existential risk due to ecosystem collapse: Nature strikes back." Futures 102 (2018): 39-50. (Ph.D. in ecology and applied mathematics from Cornell University, director of the Institute of the Environment and Sustainability at UCLA, Pritzker Distinguished Professor in Environment & Sustainability at UCLA)//Re-cut by Elmer

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (**climate change**, global **freshwater** cycle, **and** ocean **acidification**) do **pose existential risks**. This is **because of** intrinsic **positive feedback loops**, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all **directly connected to** the provision of **food and water**, and **shortages** of food and water can **create conflict** and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. **Ample clean water** is not a luxury—it **is essential for human survival**. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al., 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes **Humans** are remarkably ingenious, and **have adapted** to crises **throughout** their **history**. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). **However**, the many **stories** **of** human ingenuity **successfully** **addressing** **existential risks** such as global famine or extreme air pollution **represent** environmental c**hallenges that are** largely **linear**, have immediate consequences, **and operate without positive feedbacks**. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, **the Earth’s climate system is rife with positive feedback loops**. In particular, as CO2 increases and the climate warms, that **very warming can cause more CO2 release** which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox, Betts, Jones, Spall, & Totterdell, 2000; Hajima, Tachiiri, Ito, & Kawamiya, 2014; Knutti & Rugenstein, 2015; Rosenfeld, Sherwood, Wood, & Donner, 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warming (Melillo et al., 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey, Stone, & Quirk, 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies, Janssen, & Walker, 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that **forest fires will become more frequent** and severe with climate warming and drought (Scholze, Knorr, Arnell, & Prentice, 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al., 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-california-largest-wildfire). This **catastrophic fire** embodies the sorts of positive feedbacks and interacting factors that **could catch humanity off-guard and produce a** true **apocalyptic event.** Record-breaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry, Schramm, & Ebert, 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof, DeAngelo, Saleska, & Harte, 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement, Burgman, & Norris, 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that **runaway climate change,** and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks **portends** even greater **existential risks**. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change.

#### It's the most probable scenario for Extinction – you can’t negotiate with the environment.

Wagner and Weitzman 15 (Gernot Wagner, Ph.D. Student in Political Economy and Government, Harvard University & Martin Weitzman Professor of Economics at Harvard University, “How does climate stack up against other worst-case scenarios?”, Excerpt from “Climate Shock”)

What then, if anything, still distinguishes climate change from the others remaining: biotechnology, nanotechnology, nukes and pandemics? For one, the relatively high chance of eventual planetary catastrophe. In Climate Shock, we zero in on eventual average global warming of 6°C (11°F) as the final cutoff few would doubt represents a true planetary catastrophe. Higher temperatures are beyond anyone’s grasp. Yet our current path doesn’t exclude eventual average global warming above 6°C. In fact, our own analysis puts the likelihood at around 10 percent, and that’s for an indisputable global catastrophe. Climate change would trigger plenty of catastrophic events with temperatures rising by much less than 6°C. Many scientists would name 2°C (3.6°F) as the threshold, and we are well on our way to exceeding that, unless there is a major global course correction. Second, the gap between our current efforts and what’s needed on climate change is enormous. We are no experts on any of the other worst-case scenarios, but there at least it seems like much is already being done. Take nuclear terrorism. The United States alone spends many hundreds of billions of dollars each year on its military, intelligence and security services. That doesn’t stamp out the chance of terrorism. Some of the money spent may even be fueling it, and there are surely ways to approach the problem more strategically at times, but at least the overall mission is to protect the United States and its citizens. It would be hard to argue that U.S. climate policy today benefits from anything close to this type of effort. As for mitigating pandemics, more could surely be spent on research, monitoring and rapid response, but here too it seems like needed additional efforts would plausibly amount to a small fraction of national income. Third, climate change has firm historical precedence. There’s ample reason to believe that pumping carbon dioxide into the atmosphere is reliving the past — the distant past, but the past nonetheless. The planet has seen today’s carbon dioxide levels before: over 3 million years ago, with sea levels some 20 meters higher than today, and camels roaming the high Arctic. There are considerable uncertainties in all of this, but there’s little reason to believe that humanity can cheat basic physics and chemistry. Contrast the historical precedent of climate change with that of biotechnology, or rather the lack of it. The fear that bioengineered genes and genetically modified organisms will wreak havoc in the wild is a prime example. They may act like invasive species in some areas, but a global takeover seems unlikely, to say the least. Much like climate change, historical precedent can give us some guidance. But unlike climate change, that same historical precedent gives us quite a bit of comfort. Nature itself has tried for millions of years to create countless combinations of mutated DNA and genes. The process of natural selection all but guarantees that only a tiny fraction of the very fittest permutations has survived. Genetically modified crops grow bigger and stronger and are pesticideresistant. But they can’t outgrow natural selection entirely. None of that yet guarantees that scientists wouldn’t be able to develop permutations that could wreak havoc in the wild, but historical experience would tell us that the chance is indeed slim. In fact, the best scientists working on biotechnology seem to be much less concerned about the dangers of “Frankenfoods” and GMOs than the general public. The reverse holds true for climate change. The best climate scientists appear to be significantly more concerned about ultimate climate impacts than the majority of the general public and many policy makers. That alone should give us pause.

1. https://dictionary.cambridge.org/us/dictionary/english/unjust

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