I affirm Resolved: The appropriation of outer space by private entities is unjust.

Brackets for Clarity

**The Value is Justice**

**The criterion is minimizing structural violence.**

**The metaethic is nonideal theory. The world is not perfect, and a neutral starting point ignores current and historical injustices.**

**Mills**, Charles. "'Ideal Theory' as Ideology." *Wiley*, 20**05**, [www.jstor.org/stable/pdf/3811121.pdf?refreqid=excelsior%3A2575145b8d3e2519e9e4b977022c5d2c](http://www.jstor.org/stable/pdf/3811121.pdf?refreqid=excelsior%3A2575145b8d3e2519e9e4b977022c5d2c). Accessed 9 Dec. 2021.

Now what distinguishes ideal theory is not merely the use of ideals, since obviously nonideal theory can and will use ideals also (certainly it will appeal to the moral ideals, if it may be more dubious about the value of invoking idealized human capacities). **What distinguishes ideal theory is the reliance on idealization to the exclusion**, or at least marginalization, **of the actual**. As O'Neill emphasizes, this is not a necessary corollary of the operation of abstrac- tion itself, since one can have abstractions of the ideal-as-descriptive-model type that abstract without idealizing. But ideal theory either tacitly represents the actual as a simple deviation from the ideal, not worth theorizing in its own right, or claims that starting from the ideal is at least the best way of realizing it. Ideal theory as an approach will then utilize as its basic apparatus some or all of the following concepts and assumptions (there is necessarily a certain overlap in the list, since they all intersect with one another): \* An idealized social ontology. Moral theory deals with the normative, but it cannot avoid some characterization of the human beings who make up the society, and whose interactions with one another are its subject. So some overt or tacit social ontology has to be presupposed. **An idealized social ontology** of the modern type (as against, say, a Platonic or Aristotelian type) **will** typically **assume the abstract and undifferentiated equal atomic individuals of classical liberalism.** Thus **it will abstract away from relations of structural domination, exploitation, coercion, and oppression, which in reality, of course, will pro- foundly shape the ontology of those same individuals, locating them in superior and inferior positions in social hierarchies of various kinds.** \* Idealized capacities. The human agents as visualized in the theory will also often have completely unrealistic capacities attributed to them-unrealistic even for the privileged minority, let alone those subordinated in different ways, who would not have had an equal opportunity for their natural capacities to develop, and who would in fact typically be disabled in crucial respects. \* Silence on oppression. **Almost by definition, it follows from the focus of ideal theory that little or nothing will be said on actual historic oppression and its legacy in the present, or current ongoing oppression,** though these may be gestured at in a vague or promissory way (as something to be dealt with later). Correspondingly, **the ways in which systematic oppression is likely to shape the basic social institutions** (as well as the humans in those institutions) **will not be part of the theory's concern**, and this will manifest itself in the absence of ideal-as-descriptive-model concepts that would provide the necessary macro- and micro-mapping of that oppression, and that are requisite for understanding its reproductive dynamic. \* Ideal social institutions. **Fundamental social institutions** such as the family, the economic structure, the legal system, **will** therefore **be conceptualized in ideal**-as-idealized-model **terms, with little or no sense of how their actual work- ings may systematically disadvantage women, the poor, and racial minorities.** \* An idealized cognitive sphere. Separate from, and in addition to, the idealization of human capacities, what could be termed an idealized cognitive sphere will also be presupposed. In other words, as a corollary of the general ignoring of oppression, the consequences of oppression for the social cognition of these agents, both the advantaged and the disadvantaged, will typically not be recognized, let alone theorized. A general social transparency will be presumed, with cognitive obstacles minimized as limited to biases of self-interest or the intrinsic difficulties of understanding the world, and little or no attention paid to the distinctive role of hegemonic ideologies and group-specific experience in distorting our perceptions and conceptions of the social order. \* Strict compliance. Finally, some theorists, such as, famously, John Rawls in A Theory of Justice, also endorse "ideal theory" in the sense of"strict compliance as opposed to partial compliance theory": the examination of "the principles of justice that would regulate a well-ordered society. Everyone is presumed to act justly and to do his part in upholding just institutions." Rawls concedes that "the problems of partial compliance theory are the pressing and urgent matters. These are the things that we are faced with in everyday life." But, he argues, "The reason for beginning with ideal theory is that it provides, I believe, the only basis for the systematic grasp of these more pressing problems" (Rawls 1999, 8). Since Rawls's text is widely credited with reviving postwar Anglo- American normative political theory, and of being the most important book of the twentieth century in that tradition, this methodological decision can plausibly be argued to have been a significant factor in influencing the whole subsequent direction of the field, though I would also claim that his decision and its general endorsement also reflect deeper structural biases in the profession. Now look at this list, and try to see it with the eyes of somebody coming to formal academic ethical theory and political philosophy for the first time. Forget, in other words, all the articles and monographs and introductory texts you have read over the years that may have socialized you into thinking that this is how normative theory should be done. Perform an operation of Brechtian defamiliarization, estrangement, on your cognition. Wouldn't your spontaneous reaction be: **How in God's name could anybody think that this is the appropriate way to do ethics?** I suggest that this spontaneous reaction, far from being philosophically naive or jejune, is in fact the correct one. If we start from what is presumably the uncontroversial premise that the ultimate point of ethics is to guide our actions and make ourselves better people and the world a better place, then the framework above will not only be unhelpful, but will in certain respects be deeply antithetical to the proper goal of theoretical ethics as an enterprise. In modeling humans, human capacities, human interaction, human institutions, and human society on ideal-as-idealized-models, **in never exploring how deeply different this is from ideal-as-descriptive-models, we are abstracting away from realities crucial to our comprehension of the actual workings of injustice in human interactions and social institutions, and thereby guaranteeing that the ideal-as-idealized-model will never be achieved.** It is no accident that historically subordinated groups have always been deeply skeptical of ideal theory, generally see its glittering ideals as remote and unhelpful, and are attracted to nonideal theory, or what significantly overlaps it, "naturalized" theory. In the same essay cited above, Jaggar identifies a "unity of feminist ethics in at least one dimension," a naturalism "characteristic, though not definitive, of it" (Jaggar 2000, 453). Marxism

no longer has the appeal it once did as a theory of oppression, but it was famous for emphasizing, as in The German Ideology, the importance of descending from the idealizing abstractions of the Young Hegelians to a focus on "real, active men," not "men as narrated, thought of, imagined, conceived," but "as they actually are," in (class) relations of domination (Marx and Engels 1976,35-36). And certainly black Americans, and others of the racially oppressed, have always operated on the assumption that the natural and most illuminating starting point is the actual conditions of nonwhites, and the discrepancy between them and the vaunted American ideals. Thus Frederick Douglass's classic 1852 speech, "What to the Slave Is the Fourth [ofl July?" points out the obvious, that the inspiring principles of freedom and independence associated with the celebration are not equally extended to black slaves: "I am not included within the pale of this glorious anniversary! Your high independence only reveals the immeasurable distance between us. . ... The rich inheritance of justice, liberty, prosperity and indepen- dence, bequeathed by your fathers, is shared by you, not by me .... This Fourth July is yours, not mine. You may rejoice, I must mourn" (1996, 116, emphasis in original). So given this convergence in gender, class, and race theory on the need to make theoretically central the existence and functioning of the actual non-ideal structures that obstruct the realization of the ideal, what defensible arguments for abstracting away from these realities could there be? First, as a preliminary, we need to quickly clear away some of the ambiguities and verbal confusions that might mistakenly lead one to support ideal theory. All moral theory is ideal in the ideal-as-normative sense, but of course that's not the sense at stake here, so that can't be why we need ideal theory. Nor is ideal theory just a model, which every theory requires, since we have already distinguished models in the ideal-as-descriptive-model and models in the ideal- as-idealized-model sense. Nor can it be claimed that, whatever its faults, ideal theory is the only way to do ethics, or the only theory-supported/generalist way to do ethics (as against unsatisfactory particularist alternatives), since there is an alternative that is also generalist in the form of nonideal theory. Nor does the simple appeal to an ideal (say, the picture of an ideally just society) neces- sarily make the theory ideal theory, since nonideal theory can and does appeal to an ideal also. So these are either obviously bad arguments or simple confusions. What are the real defenses of ideal theory? A first possible argument might be the simple denial that moral theory should have any concern with making realistic assumptions about human beings, their capacities, and their behavior. Ethics is concerned with the ideal, so it doesn't have to worry about the actual. But even for mainstream ethics this wouldn't work, since, of course, ought is supposed to imply can: the ideal has to be achievable by humans. Nor could it seriously be claimed that moral theory is concerned only with mapping beautiful ideals, not their actual implementation. If any ethicist actually said this, it would be an astonishing abdication of the classic goal of ethics, and its link with practical reason. The normative here would then be weirdly detached from the prescrip- tive: this is the good and the right-but we are not concerned with their actual realization. Even for Plato, a classic example in at least one sense of an ideal theorist, this was not the case: the Form of the Good was supposed to motivate us, and help philosophers transform society. Nor could anyone seriously say that ideal theory is a good way to approach ethics because as a matter of fact (not as a conceptual necessity following from what "model" or "ideal" means), the normative here has come close to converging with the descriptive: ideal- as-descriptive-model has approximated to ideal-as-idealized-model. Obviously, the dreadful and dismaying course of human history has not remotely been a record of close-to-ideal behavior, but rather of behavior that has usually been quite the polar opposite of the ideal, with oppression and inequitable treatment of the majority of humanity (whether on grounds of gender, or nationality, or class, or religion, or race) being the norm. So the argument cannot be that as a matter of definitional truth, or factual irrelevance, or factual convergence, ideal theory is required. The argument has to be, as in the quote from Rawls above, that this is the best way of doing normative theory, better than all the other contenders. But why on earth should anyone think this? **Why should anyone think that abstaining from theorizing about oppression and its consequences is the best way to bring about an end to oppression? Isn't this, on the face of it, just completely implausible?** I suggest that since in fact there are no good reasons for making this assump- tion, and many good reasons against it, we have to look elsewhere to understand the dominance within philosophy of ideal theory. Ideal theory, I would con- tend, is really an ideology, a distortional complex of ideas, values, norms, and beliefs that reflects the nonrepresentative interests and experiences of a small minority of the national population-middle-to-upper-class white males-who are hugely over-represented in the professional philosophical population. Once this is understood, it becomes transparent why such a patently deficient, clearly counterfactual and counterproductive approach to issues of right and wrong, justice and injustice, has been so dominant. As theorists of ideology emphasize, this should not be thought of in terms of conscious conspiratorial manipulation, but rather in terms of social privilege and resulting differential experience, a nonrepresentative phenomenological life-world (mis)taken for the world, rein- forcement (in this case) by professional norms of what counts as respectable and high-prestige philosophy, and-if not to be inflated into the sole variable, certainly never to be neglected in the sociology of belief-the absence of any countervailing group interest that would motivate dissatisfaction with dominant paradigms and a resulting search for better alternatives. Can it possibly serve the interests of women to ignore female subordination, represent the family as ideal, and pretend that women have been treated as equal persons? Obviously not. Can it possibly serve the interests of people of color to ignore the centu- ries of white supremacy, and to pretend that a discourse originally structured around white normativity now substantively, as against just terminologically, includes them? Obviously not. Can it possibly serve the interests of the poor and the working class to ignore the ways in which an increasingly inequitable class society imposes economic constraints that limit their nominal freedoms, and undermine their formal equality before the law? Obviously not.1 If we ask the simple, classic question of cui bono? then it is obvious that **ideal theory can only serve the interests of the privileged**,2 who, in addition-precisely because of that privilege (as bourgeois white males)-have an experience that comes closest to that ideal, and so experience the least cognitive dissonance between it and reality, ideal-as-idealized-model and ideal-as-descriptive-model. So, as generally emphasized in the analysis of hegemonic ideologies, it is not merely the orientation by this group's interests that serves to buttress ideal theory, but their (doubly) peculiar experience of reality.

**Thus, we must use nonideal theory. Ethics that starts from an understanding of current oppression and inequalities instead of starting from a point of rationality or abstraction.**

**Prefer:**

**1.** First, oppression frustrates all ethics because it excludes its targets from ethical consideration. It must be challenged through discourse. **Winter and Leighton:**

**“**Finally, **to recognize** the operation of **structural violence forces us to ask** questions about how and **why we tolerate it,** questions **which** often have **[can be] painful** answers **for** **the privileged** elite **who unconsciously support it.** A final question of this section is how and why we allow ourselves to be so oblivious to structural violence. Susan Opotow offers an intriguing set of answers, in her article Social Injustice. She argues that **our normal** perceptual/**cognitive processes divide people into in-groups** **and out-groups**. Those outside our group  **[which] lie outside our scope of justice.** Injustice that would be instantaneously confronted if it occurred to someone we love or know is barely noticed if it occurs to strangers or those who are invisible or irrelevant. We do not seem to be able to open our minds and our hearts to everyone, so we draw conceptual lines between those who are in and out of our moral circle. **Those who fall outside are morally excluded, and become** either **invisible**, or demeaned in some wayso that we do not have to acknowledge the[ir] injusticethey suffer. **Moral exclusion** is a human failing, but Opotow argues convincingly that it **is an outcome of** everyday **social cognition. To reduce it**s nefarious effects, **we must** be vigilant in **notic[e]**ing **and listen**ing **to [the]** **oppressed**, invisible, outsiders. **Inclusionary thinking can be fostered by** relationships, **communication**, and appreciation of diversity**.”**

Winter, Deborah, & Leighton, Dana. “Structural violence.” In D. J. Christie, R. V. Wagner, & D. D. Winter (Eds.), Peace, conflict, and violence: Peace psychology in the 21st century. New York: Prentice-Hall, 2001.

**2. Structural violence is a priori bad and doesn’t need robust justification for why it's bad, oppression just is unethical. Any alternative framing that thinks oppression isn’t bad or is less important is violent.**

**Timmons**, Aaron, and Johathan Alston. "'Nobody Knows the Trouble I See' (And in National Circuit Lincoln-Douglas Debate, Does Anyone Really Care?)." *Victory Briefs*, 18 Apr. 20**14**, www.vbriefly.com/2014/04/28/20144nobody-knows-the-trouble-i-see-and-in-national-circuit-lincoln-douglas-debate-does-anyone-really-care/. Accessed 9 Dec. 2021.

Massy et al’s article is akin to a four year old repeatedly asking why and, when told by their parent that their line of questions isn’t relevant, loudly proclaiming victory. Their common refrain has been that the arguments based on the belief that “sexual assault is bad” are based only on intuition. This ignores hundreds of years of social movements and cultural debates and bloodshed that created a culture where we understand the implication of those statements. **The word genocide was created to capture the horror of** the experiences of **World War II. Emmett Till’s death was a horror that spoke to the countless horrors of lynchings** that plagued the United States since the inception of slavery. **Social movements were responsible for defining these atrocities.** Moreover, **all arguments are based on assumptions, prior knowledge that we believe to be true. Given the history of oppression, why not adopt these premises rather indifference towards suffering.** Communitarian **philosophers like Michael Sandel would take exception to** rape, lynching and **genocide being bad** only **through intuition,** as would critical race theorists like Maria Matsuda, Patricia Williams, and Derrick Bell. Philosopher George Yancy would criticize such theories as views from nowhere that assume white privilege to be the universal norm. Rather than accepting the conclusion that a debater has to prove why sexual violence is bad before a meaningful conversation can be had, we would suggest expanding the library. **Being expected to prove why slavery is bad is not a meaningful conversation; it is a highly offensive and insulting conversation precisely because it ignores history, culture and the** hard fought **experiences of students** whose reality has never been safe. When a judge lectures an Afro-Dominican student that it is okay for a moral framework to not preclude his lynching, that judge has amplified the student’s isolation in a community where he had always perceived his membership to be tenuous. When students push back against structural violence in their homes and their communities, oppression isn’t hypothetical. The verbal and rhetorical attacks against Blacks and women become attacks against the students themselves. When Rutgers College debater Chris Randall declared war against the University of Kentucky, students of color from around the United States filled his in-box and his Facebook page with love because he articulated a resistance to the constant psychic attacks of a privileged, inhumane community actively hostile to their existence. **There are many theorists who understand that moral decisions are not made by isolated uses of rationality, intuition, empiricism, and emotivism. Expanding our library is important.** The hateful arguments defended by Kristof, Massey, and Reiter represent only a small, warped part of a much larger world.

**3. Structural violence skews our epistemology. This means reducing structural violence is a prerequisite to any other framework because we can’t know how to formulate ethics if our  knowledge systems are incorrect.**

**Dotson 14**, Kristie. "Conceptualizing Epistemic Opression." *Social Epistemology*,

www.studocu.com/en-us/document/st-johns-university/contemporary-philosophy/8-dotson-conceptualizing-epistemic-oppression/12920069. Accessed 9 Dec. 2021.

Recall that an **epistemic exclusion is an unwarranted infringement on the epistemic agency of a knower, which reduces her/his ability to participate in the production of knowledge.** And also, recall that a first-order change attempts to correct for inefficiencies with respect to already present organizational goals. A first-order exclusion combines these two insights. A first-order epistemic exclusion follows from a persistent compromise of one’s epistemic agency due to inefficiency within shared epistemic resources. That is, a **first-order epistemic exclusion is an exclusion that results from the incompetent functioning of some aspect of shared epistemic resources with respect to some goal or value.** To demonstrate such inefficiency, I will extend Plato’s Allegory.10 Take the image of a line of prisoners that extends from left to right, all facing the back wall of the cave. Now, let’s extend the Allegory as follows:(1) Let us imagine that during the development of interdependent epistemic resources, the fettered persons on the left become a group about which significant, inaccurate negative prejudices evolve. This would entail that fettered persons in the centre and right hold negative prejudices concerning those bound on the left.(2) Imagine also that as a result of the prejudices there is a significant reduction in the degree of default credibility afforded the prisoners on the left.11(3) Moreover, let us imagine that there is a continuum of default credibility conferred on situated persons. As a result, the prisoners situated in the cen-tre and to the right are deemed routinely more credible than the prisoners situated to their immediate left. We are here presuming that the people on the farthest right enjoy a privileged status of credibility.The prisoners on the left function with compromised credibility profiles insofar as their default credibility is lowered due to inaccurate, negative prejudices. In the above scenario, the epistemic agency of the persons on the left is breached to the degree that they are routinely deemed less credible when attempting to offer testi-mony of their knowledge, experience and/or reflections, even when they should be deemed credible. In this extension of the Allegory, we see the creation of an “epi-stemically disadvantaged identity” (Tuana 2006, 13).Nancy Tuana, in her article, “The Speculum of Ignorance,” writes, “What femi-nist epistemologists and science studies theorists have carefully demonstrated is that **our theories of knowledge and knowledge practices are far from democratic,maintaining criteria of credibility that favor members of privileged groups”** (Tuana 2006, 13). **Whilst criteria or standards of credibility create privileged groups, they also create relatively underprivileged groups.**12As Medina explains, conferrals of credibility have a contrastive nature. He writes, “being judged credible to some degree is being regarded as more credible than others, less credible than others,and equally credible as others,” (Medina 2011, 18). This assures that there are realstakes to standards or criteria for credibility. With respect to the situated persons in the cave, the fettered persons on the left are routinely deemed less credible than fettered persons on the right.13It is important to note that the lowered default credibility of the prisoners on the left will persist. Cynthia Townley highlights that having an “epistemically disadvantaged social identity” is analogous to being given a version of the curse of Cassandra (Townley 2003). In this Greek myth, Apollo was said to have given Cassandra the gift of prophesy even whilst cursing her with unbelievability. She could offer her prophesies to others, which would be absolutely true, but every word she would utter would sound like a lie to her interlocutor. As a result, she was not believed. Hence, no matter how truthful her words were they would never gain uptake. Fettered persons, whose identities are compromised as a result of lowered credibility assessments, could tell the truth about their experiences using more and more sophisticated language and other shared resources. However, to those who believe their credibility to be compromised, those words will often sound like, at worst, lies and, at best, unreliable statements. It is difficult to impossible to break out of this kind of epistemic exclusion when one’s own capacities to engage in a given epistemic community is compromised to this degree.The people most profoundly able to dispel the myths around one’s credibility defi-cits14are also the victims of the credibility deficits due to how damaging such defi-cits are to one’s functioning within a given epistemic community (Townley 2003,106). The more widely shared the low credibility assessments are concerning a“disadvantaged epistemic identity” the more difficult they are to address.15As an example of a persisting epistemic exclusion that comprises one’s ability to contribute to knowledge production, unwarranted, devaluations of cred-ibility and the creation of epistemically disadvantaged identities are an example of epistemic oppression. What makes this a first-order epistemic oppression, how-ever, follows from what is minimally required for address. What is required to address a first-order epistemic exclusion that results from inefficiencies within shared epistemic resources is correctives aimed at facilitating greater efficiency of single-loop processes. Recall that single-loop processes are alterations made to address a given problem without changing underlying schemata. Credibility, the value that is inefficiently attenuated, is already present within instituted social imaginaries or prevailing schemata, amongst the prisoners. A new value does not necessarily need to be added, except to the degree it operates on the value in question, that is, credibility. It may not be required to remove credibility assess-ments per se, but rather, single-loop processes that bring group behaviour in con-formity with already accepted values for the sake of efficiency are minimally required. As such, first-order changes and single-loop processes constitute the minimal changes necessary to address an epistemic exclusion that results from inefficiencies within shared epistemic resources because the resources themselves are not in question, just the application of the resources.16 To see how first-order epistemic oppression is a reducible form, one needs to interrogate the major source of resistance to change for this kind of oppression.Given the fact that the inefficiently attenuated value is already held in common,the value itself is not a major catalyst for resistance. Hence, what is needed is areform, not a revolution. Still, such a reform is difficult to effect due to the land-scape of epistemic power fostered by the inefficiency itself. Epistemic power refers to relations of privilege and underprivileged afforded via different social positions,relevant resources and/or epistemological systems with respect to knowledge production. It is often bound up with social, political and economic power. However,it is distinct insofar as epistemic power can come apart from these other forms of power. Medina gives us clues as to why inefficiencies with respect to credibility can cause differentials in epistemic power. By highlighting that credibility confer-rals are contrastive, Medina also gestures to the reality that members of a given credibility economy will have a vested interest in how credibility assessments are made. Historically derived disadvantages with respect to credibility often imply historically derived advantages with respect to credibility. It is difficult to pull them apart. Medina explains as follows:The credibility excess given to some [e.g. fettered persons on the right] can be correlated to the credibility deficits assigned to others [e.g. fettered persons on the left]not because credibility is a scarce good … but because credibility is a comparative and contrastive quality, and an excessive attribution of it involves the privileged epistemic treatment of some … and the underprivileged epistemic treatment of others.(2011, 20)This privileged and underprivileged treatment is a form of epistemic power and powerlessness. Whether those given privileged treatment due to inefficient credibility economies experience an injustice in the way Medina suggests (2011,17–20), many will not abandon their privilege easily. It will be difficult to convince some that their privilege is possibly unwarranted and not their right, which is no small feat depending upon how long the privileged population has been in posses-sion of this kind of epistemic power. What makes addressing first-order epistemic oppression that results from the creation of epistemically disadvantaged identities through unwarranted credibility deficits so difficult is the epistemic power one portion of the population in question may need to surrender. It is difficult to see what would motivate relatively epistemically powerful populations to alter their credibility judgments of relatively epistemically powerless populations and, if nec-essary, lower their own default credibility.17 So though first-order epistemic oppression calls for reform within instituted social imaginaries, the difficulty in addressing first-order epistemic exclusion often follows from relations of epistemic power. In this way, this is a form of reducible epistemic oppression because the difficulty to affect a solution is reducible to his-torical formations. Who has epistemic power at any given time is a product of given social, political and epistemic formations. Epistemic power does not emerge in a vacuum. It is historically formed and, as it shifts, indicates historical changes.Due to the fact that the most significant change needed to address first-order epi-stemic oppression are shifts in epistemic power, first-order epistemic oppression is reducible to social, political and historical formations. For example, campaigns aimed at educating the group in question of the inefficient credibility assessments might be effective. Attempts to convince those who are relatively more epistemi-cally powerful to relinquish some of their power might be warranted as a first line of address. One could also pursue another option entirely

of attempting to lessen the effect of faulty credibility assessments by redistributing epistemic power according to changes in the environment of inquiry. What is important to note isa major factor one has to grapple with is the social and historical landscape of epi-stemic power.2.2.2 Second-order epistemic exclusion: second-order changes A second-order epistemic exclusion results from insufficient shared epistemic resources. To say that shared epistemic resources are insufficient is to point to limitations within those resources themselves. Let us return to the allegorical landscape we are building to demonstrate a second-order epistemic exclusion by adding the following18:(1) Elements of the experiences of the fettered persons on the left are obscured from the other prisoners due to historically being afforded unwarranted,credibility deficits.(2) The dominant shared language and instituted social imaginaries have been formed largely to reflect the experiences of the far right and other morecredible groups.(3) Let us also say that some experiences, for example, the varying shape of shadows, which are unique to the left, are relatively obscured by how collec-tive epistemic resources have been formed.Because dominant interdependent epistemic resources, that is, those shared by the majority of fettered persons, have been skewed towards the accounts of people occupying more credible locations (i.e. centre and/or right), the fettered persons the left are often required to use a language and a set of assumptions when communicating with fettered persons on the centre and right that do not ade-quately account for the full range of their experiences. An example of a disadvan-tage that may follow from this type of exclusion concerns having certain shapes of shadows remain unnamed and possibly unrecognized by the entire group, because only members on the left can see them. In this way, they suffer what MirandaFricker calls, hermeneutical injustice, where “some significant” range of their expe-rience is “obscured from collective understanding” due to gaps within the interde-pendent epistemic resources themselves (Fricker 2007, 155).19**Having one’s experiences obscured and rendered unintelligible due to** herme-neutical **injustice is an infringement upon the epistemic agency** of the fettered per-sons on the left. The epistemic exclusion present here does not necessarily denote that the fettered persons on the left have no names, for example, of the shadows they alone can see. Rather, the exclusion follows from being unable to communi-cate their experience to others within their larger epistemic community who do not share epistemic resources sufficient for tracking those experiences, especially where such experience is immediately relevant for knowledge production. **Being unable to communicate large portions of one’s experiences due to the deficient nature of dominant, shared epistemic resources, for example profoundly impacts one's ability to contribute to knowledge production insofar as utilizing insufficient epistemic resources disable one’s ability to fully render one’s experience intelligible to all relevant interlocutors.** The utilizing insufficient nature of dominantly shared epistemic resources compromises the epistemic agency of the fettered persons on the left.20 If left unaddressed, a second-order epistemic exclusion will persist indefinitely.In cases of second-order epistemic exclusions**, the epistemic resources in question function well for a significant portion of the social population, for example, more epistemically powerful portions, and poorly for others. Those whose experiences are o**bscured by existing epistemic resources are in the position of having to challenge those resources that many believe are reliable and, generally, well func-tioning. It is important to note that epistemological resilience follows from just this fact and realization. Collective epistemic resources can and do function well enough to produce knowledge about a number of relevant aspects of our lives or they would never have become shared to any large degree. Due to epistemological resilience, which is partially formed by the reliability of dominant epistemic resources, gaps within those resources can continue indefinitely due to a relatively low demand for change. As such, second-order epistemic exclusions form the basis of second-order epistemic oppression.Second-order epistemic oppression results from the ways interdependent episte-mic resources have developed over time. Like with first-order epistemic oppres-sion, the major resistance to change for second-order epistemic oppression follows from epistemic power or epistemic structures of privilege and underprivileged. Maria Lugones comments on the persistence of this kind of epistemic power in her article, “Playfulness, World-Travelling and Loving Perception.” She writes ofrelationships between women of colour feminists and “White/Anglo” feminists:I am particularly interested here in those many cases in which White/Anglo women do one or more of the following to women of color: they ignore us, ostracize us, renderus invisible, stereotype us, leave us completely alone, interpret us as crazy. All this while we are in their midst … Their world and their integrity do not require me at all.(Lugones 1987, 7; emphasis in original)To say the world and integrity of “White/Anglo” women does not require women of colour, like Lugones, is to gesture to the reality that such women can get along fine without acknowledging their reliance on women of colour or possi-ble insights from women of colour. Though one may be able to argue for the ben-efits of consulting other opinions, certainly many have and continue to make such arguments; one continually has to entreat people who, by and large, have the epi-stemic power to simply ignore such arguments. After all, the dominant, shared epi-stemic resources work just fine for many. Convincing people that they are missing something integral when, in fact, they cannot detect such deficiencies is no easy task.Given that second-order epistemic exclusion follows from insufficient shared epistemic resources, it minimally requires second-order changes and double-loop processes that call into question the operative epistemic resources themselves.Recall that a double-loop process occurs when individuals or groups are willing to change their ways of thinking and their values to improve effectiveness. Significant Shifts in collective epistemic resources required to address infringements on episte-mic agency that result from the insufficient epistemic resources entail the willing-ness to change one’s views and general ways of thinking. In other words, it requires one to be willing to change one’s instituted social imaginaries and/or prevailing schemata. A “conceptual revolution” is required (Langton 2010, 460, 463).Second-order changes most likely involve first-order changes as well, where it becomes necessary for fettered persons with relatively stronger default credibility to listen seriously to fettered persons with relatively weaker default credibility, which will be a challenge for reasons gestured to in the previous section. Yet, addressing a second-order epistemic exclusion could not be addressed with merely first-order changes. It would also require second-order changes, where one comes to recog-nize that the very epistemic resources on which one relies are in need of significant revision and executes those revisions.A second-order epistemic oppression follows from the reality that whilst inter-dependent epistemic resources illuminate some aspects of our worlds, they simul-taneously work to obscure other aspects. Those populations who generally suffer the brunt of the dual-sided nature of interdependent epistemic resources are hardly ever accidentally chosen populations. The construction of epistemically disadvan-taged identities and a range of ignorance-producing social/political exclusions often determine who will most likely experience second-order epistemic oppression. His-torical, social and political formations of marginalization largely account for who finds herself/himself suffering from second-order epistemic oppression. As such,like first-order epistemic oppression, the major source of inertia involves the impe-tus to change in those with relatively more epistemic power. The creation of alter-native epistemologies is an important step for a relatively epistemically powerless population, but does not necessarily lessen the impact of second-order epistemic oppression when one is still required to utilize insufficient, dominant, shared epi-stemic resources. Hence, relative epistemic power, that is, privilege with respect to insufficient resources via finding those resources well fitted to one’s own experi-ences and understandings of the world, must be grappled with as a major source of inertia in addressing second-order epistemic oppression. And, as with first-order epistemic oppression, historical, social and political factors determine who will possess that epistemic power and who will be relatively powerless. Second-order epistemic oppression, like the first, is a reducible epistemic oppression given that the major resistance to change is reducible to the social and historical development of epistemic power.

**4. Abstracting away from structural issues reinforces racism.**

Christopher A. **Bracey 6**, Associate Professor of Law, Associate Professor of African & African American Studies, Washington University in St. Louis, September, Southern California Law Review, 79 S. Cal. L. Rev. 1231, p. 1318

Second, **reducing conversation on race matters to an ideological contest allows opponents to elide inquiry into whether the results of a particular preference policy are desirable. Policy positions masquerading as principled ideological stances create the impression that a racial policy is not simply a choice among available alternatives, but the embodiment of some higher moral principle.** Thus, the "principle" becomes an end in itself, without reference to outcomes. Consider the prevailing view of colorblindness in constitutional discourse. Colorblindness has come to be understood as the embodiment of what is morally just, **independent of its actual effect upon the lives of racial minorities.** This explains Justice Thomas's belief in the "moral and constitutional equivalence" between Jim Crow laws and race preferences, and his tragic assertion that "Government cannot make us equal [but] can only recognize, respect, and protect us as equal before the law." 281 For Thomas, there is no meaningful difference between laws designed to entrench racial subordination and those designed to alleviate conditions of oppression. Critics may point out that colorblindness in practice has the effect of entrenching existing racial disparities in health, wealth, and society. But **in framing the debate in purely ideological terms, opponents are able to avoid the contentious issue of outcomes and make viability determinations based exclusively on whether racially progressive measures exude fidelity** to the ideological principle of colorblindness. **Meaningful policy debate is replaced by ideological exchange , which further exacerbates hostilities and deepens the cycle of resentment.**

**5.  Focus on high magnitude low probability threats is illogical, and leads to poor decision making**

**Mueller & Stewart ’11** [John, Woody Hayes National Security Studies and Professor of Political Science @ Ohio State University, Mark, Professor of Civil Engineering and Director of the Centre for Infrastructure Performance and Reliability at the University of Newcastle in Australia, “Terror, Security, and Money”, page numbers below]

Focusing on Worst-Case Scenarios Cass Sunstein, who seems to have invented the phrase "probability neglect," assesses the version of the phenomenon that comes into being when "emotions are intensely engaged." Under that circumstance, he argues, **"people’s attention is focused on the bad outcome itself and they are inattentive to the fact that it is unlikely to occur."** Moreover, **they are inclined to "demand a substantial governmental response-even if the magnitude of the risk does not warrant the response."** It may be this phenomenon that Treverton experienced. Playing to this demand, **government officials are inclined to focus on worst-case scenarios,** presumably in the knowledge, following Sunstein's insight, that this can emotionally justify just about any expenditure, **no matter how unlikely the prospect the dire event will actually take place. Accordingly; there is a preoccupation with "low probability/ high consequence" events,** such as the detonation of a sizable nuclear device in midtown Manhattan. The process could be seen in action in an article published in 2008 by Secretary of Homeland Security (DHS) Michael Chertoff. He felt called upon to respond to the observation that the number of people who die each year from international terrorism, while tragic, is actually exceedingly small. "This fails to consider," he pointed out, "the much greater loss of life that Weapons of mass destruction could wreak on the American people." That is, he was justifying his entire budget-only a limited portion of which is concerned with Weapons of mass destruction by the WMD threat, even while avoiding assessing its likelihood. It is sometimes argued that conventional risk analysis breaks down under extreme conditions because the risk is now a very large number (losses) multiplied by a very small number (attack probability). But it is not the risk analysis methodology that is at fault here, but our ability to use the information obtained from the analysis for decision making. A "high consequence" event has been defined to be a "disaster" or "catastrophe" resulting in "great human costs in life, property environmental damage, and future economic activity" However, depending on how one weighs the words in that definition, there may have been only one terrorist event in all of history that qualifies for inclusion. Moreover, the vast bulk of homeland security expenditures is not focused on events that fit a definition like that, but rather on comparatively low-consequence ones, like explosions set off by individual amateur jihadists. Analyst Bruce Schneier has written penetratingly of worst-case thinking. He points out that it , involves **imagining the worst possible outcome and then acting as if it were a certainty.** It **substitutes imagination for thinking, speculation for risk analysis, and fear for reason. It fosters powerlessness and vulnerability and magnifies social [immobilization]** ~~paralysis~~. And it makes us more vulnerable to the effects of terrorism. It leads to bad decision making because it's only half of the cost-benefit equation. Every decision has costs and benefits, risks and rewards. **By speculating about what can possibly go wrong, and then acting as if that is likely to happen, worst-case thinking focuses only on the extreme but improbable risks and does a poor job at assessing**

**outcomes.** It also assumes "that a proponent of an action must prove that the nightmare scenario is impossible," and it "can be used to support any position or its opposite. If we build a nuclear power plant, it could melt down. If we don't build it, We will run short of power and society will collapse into anarchy" And worst, it "validates ignorance" because, **"instead of focusing on what we know, it focuses on what we don't know-and what we can imagine."** In the process, "risk assessment is devalued" and "probabilistic thinking is repudiated in favor of possibilistic thinking." As Schneier also notes, worst-case thinking is the driving force behind the precautionary principle, a decent working definition of which is "action should be taken to correct a problem as soon as there is evidence that harm may occur, not after the harm has already occurred." It could be seen in action less than a week after 9/11, when President George W Bush outlined his new national security strategy: "We cannot let our enemies strike first . . . [but must take] anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy's attack. To forestall or prevent such hostile acts by our adversaries, the United States, will, if necessary act preemptively \_ . . America will act against such emerging threats before they are fully formed." The 2003 invasion of Iraq, then, was justified by invoking the precautionary principle based on the worst-case scenario in which Saddam Hussein might strike. If, on the other hand, any worst-case thinking focused on the potential for the destabilizing effects a war would have on Iraq and the region, the precautionary principle would guide one to be very cautious about embarking on war. As Sunstein notes, the precautionary principle "offers no guidance-not that it is wrong, but that it forbids all courses of action, including regulation." Thus, "taken seriously it is paralyzing, banning the very steps that it simultaneously requires."9 It can be invoked in equal measure to act or not to act. There are considerable dangers in applying the precautionary principle to terrorism: on the one hand, **any action taken to reduce a presumed risk always poses the introduction of countervailing risks**, while on the other, larger, expensive counterterrorism efforts will come accompanied by high opportunity costs." Moreover "For public officials no less than the rest of us, the probability of harm matters a great deal, and it is foolish to attend exclusively to the worst case scenario." A more rational approach to worst-case thinking is to establish the likelihood of gains and losses from various courses of action, including staying the current course." This, of course, is the essence of risk assessment. **What is necessary is due consideration to the spectrum of threats, not simply the worst one imaginable,** in order to properly understand, and coherently deal with, the risks to people, institutions, and the economy The relevant decision makers are professionals, and it is not unreasonable to suggest that they should do so seriously. Notwithstanding political pressures (to be discussed more in chapter 9), the fact that the public has difficulties with probabilities when emotions are involved does not relieve those in charge of the requirement, even the duty to make decisions about the expenditures of vast quantities of public monies in a responsible manner. [page 14-17]

**Offense:**

**1. Private appropriation of outer space wastes money that could be spent on the general welfare and combating poverty on the endeavors of a privileged few.**

**Reimann**, Nicholas. "Leaving a Planet in Crisis: Here's Why Many Say the Billionaire Space Race Is a Terrible Idea." *Forbes*, 12 July 20**21**, www.forbes.com/sites/nicholasreimann/2021/07/12/leaving-a-planet-in-crisis-heres-why-many-say-the-billionaire-space-race-is-a-terrible-idea/?sh=5ddb946b77c9. Accessed 4 Jan. 2022.

The four minutes billionaire Sir [Richard Branson](https://www.forbes.com/profile/richard-branson/) spent in a state of [weightlessness](https://www.nytimes.com/live/2021/07/11/science/virgin-galactic-launch-richard-branson) on the edge of space this weekend was a historic feat in the burgeoning space tourism business, but many critics say [**Branson and other billionaires**](https://www.forbes.com/sites/tommybeer/2021/07/12/space-feud-here-are-all-the-jabs-traded-between-bezos-and-branson-and-yes-musk/) **are missing the mark by looking to the stars, leaving behind a planet rife with problems that big investments might be able to fix.** Branson, 71, [traveled about 50 miles](https://www.forbes.com/sites/alexknapp/2021/07/11/richard-bransons-17-year-journey-into-space-how-virgin-founder-became-first-billionaire-to-fly-own-rocket/?sh=a6c8c6155ff3) above the Earth’s surface on his Virgin Galactic spacecraft as part of an effort to “evaluate the private astronaut experience” on Sunday, beating out fellow billionaire Jeff Bezos in the race to escape the Earth’s atmosphere. Bezos, [the world’s richest man](https://www.forbes.com/profile/jeff-bezos/?sh=248b82c51b23), is planning to head to space on his Blue Origin craft on July 20 and will travel farther from Earth’s surface than Branson—some 62 miles. He’ll be accompanied by a fellow space tourist [who paid $28 million](https://www.forbes.com/sites/alexknapp/2021/06/12/auction-winner-to-join-jeff-bezos-in-space-with-a-28-winning-bid/) for a seat on the spaceflight. [Elon Musk](https://www.forbes.com/profile/elon-musk/) hasn’t announced plans on shooting himself away from Earth (yet), but his company—SpaceX—is widely considered the leader in the private space industry, and Musk has made it known his top priority is to make humans an “interplanetary species.” [Critics](https://www.theatlantic.com/science/archive/2021/07/space-billionaires-jeff-bezos-richard-branson/619383/) point out **the big-money focus on space is coming at an especially vulnerable point on Earth—where the Covid pandemic is still causing widespread death** while **historic heat waves prompt concerns global warming has reached a dangerous new level.** The United Nations has also repeatedly warned **widespread famines could come to poor nations as a result of the pandemic**, and the UN released a [report](https://www.who.int/news/item/12-07-2021-un-report-pandemic-year-marked-by-spike-in-world-hunger) on Monday finding 811 million were undernourished during 2020. “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**?”former U.S. Labor Secretary Robert Reich tweeted on Thursday. Branson’s brief trip to space wasn't [totally without scientific merit](https://www.forbes.com/sites/valeriestimac/2021/07/11/virgin-galactics-historic-flight-wasnt-just-space-tourism/?sh=62ff5511792f). Sirisha Bandla, Virgin Galactic’s vice president of government affairs and research operations, flew with Branson on Sunday and conducted an experiment on plant gene expression. The experiment itself was also a test of whether scientific research is feasible on Virgin Galactic’s spaceflights. Based on Bandla’s account after landing, her mission was a success. The driving force behind space travel has shifted away from its long history of massive government projects to private industry over the past few years. SpaceX’s May 2020 launch of two NASA astronauts from Kennedy Space Center in Florida marked the first manned launch from U.S. soil since 2011, with SpaceX becoming the first private company to send astronauts to the International Space Station during the same mission. Musk’s company has since been chosen as the sole company that will create spacecraft for NASA’s upcoming Artemis mission to send astronauts [back to the Moon](https://www.forbes.com/sites/nicholasreimann/2021/04/16/musks-spacex-beats-out-bezos-and-blue-origin-for-nasa-spacecraft/?sh=28976e5f37d6), beating out Blue Origin for the contract. But the shift to **privatization** hasn’t just put billionaire’s companies at the forefront of scientific achievements—it’s **[has] accelerated the push for space tourism programs, which for now come with price tags solely restricted to the ultrawealthy.** There’s also already been talk of luxury

space hotels. **Orbital Assembly Corp.** [**announced**](https://www.architecturaldigest.com/story/worlds-first-space-hotel-open-2027) **plans** earlier this year **for a 280-guest hotel called Voyager Station, which it said will open in 2027**. The company hopes to work with SpaceX as a partner on the project. **$6 billion. That’s how much money it would take to save 41 million people set to die of hunger this year** worldwide, according to **UN World Food Program Executive Director David Beasley.** Beasley **sent a tweet late last month urging Musk, Branson and Bezos to team up to fight hunger, saying, “We can solve this quickly!”**

**2. Private space exploration relies on a colonialist mindset and ignores earth’s *actual* inequalities and issues.**

**McCormick**, Ted. "The Billionaire Space Race Reflects a Colonial Mindset That Fails to Imagine a Different World." *The Conversation*, 15 Aug. 20**21**,theconversation.com/the-billionaire-space-race-reflects-a-colonial-mindset-that-fails-to-imagine-a-different-world-165235. Accessed 4 Jan. 2022.

Today, **the moon and Mars are in projectors’ sights.** And **the promises billionaires Elon Musk and Jeff Bezos make for colonization are similar in ambition to those of four centuries ago.** As Bezos told an audience at the [International Space Development Conference](https://www.geekwire.com/2018/jeff-bezos-isdc-space-vision/) in 2018: “We will have to leave this planet, and we’re going to leave it, and it’s going to make this planet better.” **Bezos** traces his thinking to Princeton physicist Gerald O’Neill, whose 1974 article “[The Colonization of Space](https://space.nss.org/the-colonization-of-space-gerard-k-o-neill-physics-today-1974/)” (and 1977 book, *The High Frontier*) **presented orbiting settlements as solutions to nearly every major problem facing the Earth.** Bezos echoes O’Neill’s proposal to move heavy industry — and industrial labour — off the planet, rezoning Earth as a mostly residential, green space. A garden, as it were. Jeff Bezos talks about space exploration and leadership at the 2018 International Space Development Conference. **Musk’s plans for Mars are at once more cynical and more grandiose,** in timeline and technical requirements if not in ultimate extent. **They center on the dubious possibility of “**[**terraforming**](https://www.businessinsider.com/nasa-just-quashed-elon-musks-plans-to-make-mars-habitable-for-humans-2018-7)**” Mars using resources and technologies that don’t yet exist.** Musk planned to [send the first humans to Mars in 2024](https://www.businessinsider.com/elon-musk-spacex-mars-plan-timeline-2018-10), and by 2030, he envisioned breaking ground on a city, [launching as many as 100,000 voyages from Earth to Mars](https://www.businessinsider.com/elon-musk-says-we-could-put-a-million-people-on-mars-within-a-century-2015-6) within a century. As of 2020, the timeline had been pushed back slightly, in part because terraforming may require bombarding Mars with 10,000 nuclear missiles to start. But **the vision – a Mars of thriving crops, pizza joints and “entrepreneurial opportunities,” preserving life and paying dividends while Earth becomes increasingly uninhabitable — remains.** Like the colonial [company-states](https://doi.org/10.1177/1354066120928127) of the 17th and 18th centuries, [Musk’s SpaceX leans heavily on government backing but will make its own laws on its newly settled planet](http://bostonreview.net/science-nature/alina-utrata-lost-space). A failure of the imagination The techno-utopian visions of **Musk and Bezos** betray some of the same assumptions as their early modern forebears. They **offer colonialism as a panacea for complex social, political and economic ills, rather than attempting to work towards a better world within the constraints of our environment.** And **rather than facing the palpably devastating consequences of an ideology of limitless growth on our planet, they seek to export it, unaltered, into space. They imagine themselves capable of creating liveable environments where none exist. But for all their futuristic imagery, they have failed to imagine a different world.** And they have ignored the history of colonialism on this one. Empire never recreated Eden, but it did fuel centuries of growth based on expropriation, enslavement and environmental transformation in defiance of all limits. We are struggling with these consequences today.

**3. Private space exploration gives corporations too much power over individuals, and opens the door for monopolies.**

**Ward**, Peter. "The Unintended Consequences of Privatizing Outer Space." *Science Focus*, 6 Nov. 20**19**,www.sciencefocus.com/space/the-unintended-consequences-of-privatising-space/. Accessed 4 Jan. 2022.

But **space** isn’t the bastion of free-floating freedom some think it is, and it’s **[is] ripe for exploitation by monopolies. A space station operator,** for example, **could decide which fibre optics manufacturer could use its facility and which could not. The fibre optics produced in a zero-gravity environment are much cleaner and more valuable than that produced on Earth, meaning that one company would have a massive advantage,** and the space station would decide who had access to the best manufacturing conditions. That’s just one example of a potential monopoly, but if you go further into the future of space exploration, things only get more frightening. **Imagine a colony on** [**the Moon**](https://www.sciencefocus.com/tag/the-moon/) or [Mars](https://www.sciencefocus.com/space/mars-facts-figures-fun-questions-red-planet/) **run by a corporation. That one company would control everything the colonists need to survive, from the water to the oxygen to the food. That’s a dangerous amount of power for any company, but it’s a very real scenario.** So what stops a major corporation landing on the Moon and setting up a colony? One very old document. [The Outer Space Treaty](http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html) was signed in 1967 by all of the major space-faring nations, and explicitly states nobody can go to another planet or the Moon and claim that territory for their own. It’s a very important document, but it’s flawed. For one thing, the private space sector wasn’t around when the treaty was written so it’s not clear how some of the rules would be applied to private companies. And secondly, given the ambitions of many countries and corporations, there’s no way it’s going to last much longer. Anyone with a plan to land on the Moon or Mars and stay there is going to run into the Outer Space Treaty, and the smart money is on the wealthy and powerful winning out against an old loophole-ridden document. Politicians such as Ted Cruz in the United States have [already called for changes](https://spacenews.com/cruz-interested-in-updating-outer-space-treaty-to-support-commercial-space-activities/) to be made to the treaty, and given the increasing amounts of money private space companies spend on lobbying in the United States, more such attempts will follow. **It’s imperative that the space community as a whole takes this issue on to ensure the needs of all, and not just the private sector, are taken into account should any alterations be made.** The further we look into the future of humans in space, the more reality resembles science fiction. That’s why it’s difficult to make people take the issues which could potentially arise seriously. But **now is the time to consider the problems that could arise from a commercially-led space race, and take the necessary small steps now to avoid potentially disastrous consequences** in the future.

**4. Privatization of outer space just helps the rich get richer, deepening the already giant economic inequality on earth.**

**Bensaid**, Adam. "The Race for Space Colonisation and Limitless Wealth Is Already Here." *TRT World*, 29 Mar. 20**21**, [www.trtworld.com/magazine/the-race-for-space-colonisation-and-limitless-wealth-is-already-here-45430](http://www.trtworld.com/magazine/the-race-for-space-colonisation-and-limitless-wealth-is-already-here-45430). Accessed 4 Jan. 2022.

Money from money Privatized or not, **most of the world’s countries are likely to be adversely affected.** Companies like Planetary Resources, founded as early as 2012, were quickly joined by Deep Space Industries and dozens of others hoping for a slice of the pie. **The growth of private space resource companies is backed by pro-establishment banks like Goldman Sachs, one of a handful of banks able to finance projects of this magnitude.**  A report by Goldman Sachs believes fervently in the lucrative profit **asteroid mining** promises. The endeavour has a high “psychological barrier”, but isn’t difficult in terms of “actual financial and technological barriers”, it [reports](http://uk.businessinsider.com/goldman-sachs-space-mining-asteroid-platinum-2017-4). A university of California Technology [study](http://spaceindustrybulletin.com/space-mining-market-expected-to-reach-us2-84bn-by-2023/) says that **mining an asteroid would cost roughly $2.6 billion.** That’s not much higher than most NASA missions. Even a rare mineral mine on earth needs around $1 billion in set-up costs. But one football field-sized asteroid in space could contain as much as $50 billion in rare earth minerals alone. Deep ramifications **This could have devastating effects on the earth’s economy. While the space resources will undoubtedly lead to the creation of entirely new careers, the glut of rare earth minerals previously valuable because they are finite could end up crashing rare earth markets altogether.**  If that doesn’t happen, **countries without access to space mining programs are going to be left far behind countries and private companies that have reached a multi-planetary status, able to leverage off-world income.** For many, **this promises an era of monopoly and unfair competition. For successful companies like SpaceX, international law is vague about what it takes to claim a planet as your own.** Deeper ethical issues arise, including whether an employer has the right to control reproduction in hostile space environments. **Another pressing question is what separates colonial employees from indentured labourers, with future Martian settlers likely facing a one-way ticket in exchange for a lifetime of labour.** More critically, if Mars is settled by a private company, what kind of government will it use, if any?  Geopolitically, **space resource mining also promises economic supremacy to a few nations over the vast majority of earth, bringing near limitless pockets to a tiny minority, and with it concentrated power in a way humanity has never experienced before.**

**5. Private space exploration is elitist and only accessible to the ultra wealthy.**

**Griffin**, Andrew. "Elon Musk's Space X Programme Shows How the Elitist Space Race Descended into Uninspiring Holidays for the Ultra-Rich." *Andrew Griffin*, 28 Feb. 20**17**, [www.independent.co.uk/voices/elon-musk-spacex-nasa-moon-travel-only-if-you-can-afford-it-a7603486.html](http://www.independent.co.uk/voices/elon-musk-spacex-nasa-moon-travel-only-if-you-can-afford-it-a7603486.html). Accessed 4 Jan. 2022.

Space travel and exploration has always been a hybrid project between the public and private sector. **Over decades** [**Nasa**](https://www.independent.co.uk/topic/Nasa) **and other space agencies have created stunning innovations – only to have these discoveries taken by private companies and turned into profit.** Everything from modern cameras to the sole of Adidas’ Boost sneakers trade on ideas that were originally created by space agencies. But **the new** [**SpaceX**](https://www.independent.co.uk/topic/spacex) **development is more depressing than any of those corporate arrangements. It sees** [**Elon Musk’s**](https://www.independent.co.uk/topic/elon-musk) **company steal the very founding ideals of space travel and sell them on to the highest bidder.** It has announced that, with Nasa’s help, it will fling [two people that have paid a “significant deposit” up into space](https://www.independent.co.uk/news/science/spacex-elon-musk-fly-moon-next-year-a7602936.html), around the moon, and back again. The business of being an astronaut used to be a strange, intoxicating pursuit. Militaristic and elite, its heroes embodied the very best of American and Russian values: pride, bravery, glory and success. **Now, those who go into space will no longer be selected for their skill at flying, or the steely heroism that made people like Neil Armstrong and Yuri Gagarin into national heroes. Instead, they’ll be picked based on whether they can pay the estimated $150m** (£120m) that it costs to take the journey. Apparently, **the US no longer chooses its best people to go into space, or to run the country, but instead selects its richest**. The space race was never healthy: in its glory days, it was a major part of Cold War competition. Politicians were less motivated by the joys of space than the shame they’d feel if the other superpower got there first. Space might have been the final frontier but it followed a history of frontiers, all of which required the extermination and subjugation of others through military means. However, **at least when rockets were funded as part of the space race, the engineers and scientists behind it could pretend it was something meaningful, and focus on innovation – now they are being relegated to highly qualified travel agents, working on what amounts to extraterrestrial coach holidays for the ultra-rich.** Throughout history, space exploration was able to keep alive its founding (if perhaps mythic) ideal: that it was being done in the service of a far bigger goal; all of humanity united in exploring beyond itself to find planets and perhaps even life that would challenge our understanding of what we are and can be. But now, **if human space exploration serves no real purpose other than entertainment, then the message is nothing more than this: the only way to leave this damaged and dying Earth is if you have a few hundred million pounds** going spare. Exploration in the name of humanity has been replaced by exploration in the name of the highest bidder. Space is populated by vast worlds untouched by humanity and beyond most of our imaginations. But these images can’t stay imaginary forever – we are destroying our own planet at such a rate that we might soon have to leave it and start living elsewhere, something that both Elon Musk and Donald Trump agree on. Could there possibly be a less inspiring way to restart our mission to disperse humans across the solar system than having two tourists, probably billionaires, pay excruciating sums of money to do so? Elon Musk has already said that he might have to detonate two huge nuclear warheads on Mars to alter the environment and let us live there. Now SpaceX seems set on doing the same to our very idea of space travel.