## DA

#### Commercial asteroid mining is coming now – lower costs and improving tech make it economically viable – and the legal basis is already in place in multiple countries– that helps acquire water for rocket fuel and rare earth metals

Gilbert 21, PhD student in space resources at the Colorado School of Mines, writes in 21 alex gilbert, is a complex systems researcher and a PhD student in space resources at the Colorado School of Mines. "Mining in Space Is Coming." Milken Institute Review, April 26, 2021, [www.milkenreview.org/articles/mining-in-space-is-coming](http://www.milkenreview.org/articles/mining-in-space-is-coming). [Quality Control]

Space exploration is back. after decades of disappointment, a combination of better technology, falling costs and a rush of competitive energy from the private sector has put space travel front and center. indeed, many analysts (even some with their feet on the ground) believe that commercial developments in the space industry may be on the cusp of starting the largest resource rush in history: mining on the Moon, Mars and asteroids.

While this may sound fantastical, some baby steps toward the goal have already been taken. Last year, NASA awarded contracts to four companies to extract small amounts of lunar regolith by 2024, effectively beginning the era of commercial space mining. Whether this proves to be the dawn of a gigantic adjunct to mining on earth — and more immediately, a key to unlocking cost-effective space travel — will turn on the answers to a host of questions ranging from what resources can be efficiently.

As every fan of science fiction knows, the resources of the solar system appear virtually unlimited compared to those on Earth. There are whole other planets, dozens of moons, thousands of massive asteroids and millions of small ones that doubtless contain humungous quantities of materials that are scarce and very valuable (back on Earth). Visionaries including Jeff Bezos imagine heavy industry moving to space and Earth becoming a residential area. However, as entrepreneurs look to harness the riches beyond the atmosphere, access to space resources remains tangled in the realities of economics and governance.

Start with the fact that space belongs to no country, complicating traditional methods of resource allocation, property rights and trade. With limited demand for materials in space itself and the need for huge amounts of energy to return materials to Earth, creating a viable industry will turn on major advances in technology, finance and business models.

That said, there’s no grass growing under potential pioneers’ feet. Potential economic, scientific and even security benefits underlie an emerging geopolitical competition to pursue space mining. The United States is rapidly emerging as a front-runner, in part due to its ambitious Artemis Program to lead a multinational consortium back to the Moon. But it is also a leader in creating a legal infrastructure for mineral exploitation. The United States has adopted the world’s first spaceresources law, recognizing the property rights of private companies and individuals to materials gathered in space.

However, the United States is hardly alone. Luxembourg and the United Arab Emirates (you read those right) are racing to codify space-resources laws of their own, hoping to attract investment to their entrepot nations with business-friendly legal frameworks. China reportedly views space-resource development as a national priority, part of a strategy to challenge U.S. economic and security primacy in space. Meanwhile, Russia, Japan, India and the European Space Agency all harbor space-mining ambitions of their own. Governing these emerging interests is an outdated treaty framework from the Cold War. Sooner rather than later, we’ll need new agreements to facilitate private investment and ensure international cooperation.

What’s Out There

Back up for a moment. For the record, space is already being heavily exploited, because space resources include non-material assets such as orbital locations and abundant sunlight that enable satellites to provide services to Earth. Indeed, satellite-based telecommunications and global positioning systems have become indispensable infrastructure underpinning the modern economy. Mining space for materials, of course, is another matter.

In the past several decades, planetary science has confirmed what has long been suspected: celestial bodies are potential sources for dozens of natural materials that, in the right time and place, are incredibly valuable. Of these, water may be the most attractive in the near-term, because — with assistance from solar energy or nuclear fission — H2O can be split into hydrogen and oxygen to make rocket propellant, facilitating in-space refueling. So-called “rare earth” metals are also potential targets of asteroid miners intending to service Earth markets. Consisting of 17 elements, including lanthanum, neodymium, and yttrium, these critical materials (most of which are today mined in China at great environmental cost) are required for electronics. And they loom as bottlenecks in making the transition from fossil fuels to renewables backed up by battery storage.

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

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

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

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

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

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

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

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

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

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

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

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

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

## NC

#### The standard is maximizing expected wellbeing.

#### 1] Extinction o/ws under any framework, even under moral uncertainty – infinite future generations

Pummer 15 — (Theron Pummer, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford, “Moral Agreement on Saving the World“, Practical Ethics University of Oxford, 5-18-2015, Available Online at http://blog.practicalethics.ox.ac.uk/2015/05/moral-agreement-on-saving-the-world/, accessed 7-2-2018, HKR-AM) \*\*we do not endorse ableist language=

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

#### 2] Non util ethics are impossible

Greene 10 – Joshua, Associate Professor of Social science in the Department of Psychology at Harvard University (The Secret Joke of Kant’s Soul published in Moral Psychology: Historical and Contemporary Readings, accessed: www.fed.cuhk.edu.hk/~lchang/material/Evolutionary/Developmental/Greene-KantSoul.pdf)

**What turn-of-the-millennium science** **is telling us is that human moral judgment is not a pristine rational enterprise**, that our **moral judgments are driven by a hodgepodge of emotional dispositions, which themselves were shaped by a hodgepodge of evolutionary forces, both biological and cultural**. **Because of this, it is exceedingly unlikely that there is any rationally coherent normative moral theory that can accommodate our moral intuitions**. Moreover, **anyone who claims to have such a theory**, or even part of one, **almost certainly doesn't**. Instead, what that person probably has is a moral rationalization. It seems then, that we have somehow crossed the infamous "is"-"ought" divide. How did this happen? Didn't Hume (Hume, 1978) and Moore (Moore, 1966) warn us against trying to derive an "ought" from and "is?" How did we go from descriptive scientific theories concerning moral psychology to skepticism about a whole class of normative moral theories? The answer is that we did not, as Hume and Moore anticipated, attempt to derive an "ought" from and "is." That is, our method has been inductive rather than deductive. We have inferred on the basis of the available evidence that the phenomenon of rationalist deontological philosophy is best explained as a rationalization of evolved emotional intuition (Harman, 1977). Missing the Deontological Point I suspect that **rationalist deontologists will remain unmoved by the arguments presented here**. Instead, I suspect, **they** **will insist that I have simply misunderstood what** Kant and like-minded **deontologists are all about**. **Deontology, they will say, isn't about this intuition or that intuition**. It's not defined by its normative differences with consequentialism. **Rather, deontology is about taking humanity seriously**. Above all else, it's about respect for persons. It's about treating others as fellow rational creatures rather than as mere objects, about acting for reasons rational beings can share. And so on (Korsgaard, 1996a; Korsgaard, 1996b). **This is, no doubt, how many deontologists see deontology. But this insider's view**, as I've suggested, **may be misleading**. **The problem**, more specifically, **is that it defines deontology in terms of values that are not distinctively deontological**, though they may appear to be from the inside. **Consider the following analogy with religion. When one asks a religious person to explain the essence of his religion, one often gets an answer like this: "It's about love**, really. It's about looking out for other people, looking beyond oneself. It's about community, being part of something larger than oneself." **This sort of answer accurately captures the phenomenology of many people's religion, but it's nevertheless inadequate for distinguishing religion from other things**. This is because many, if not most, non-religious people aspire to love deeply, look out for other people, avoid self-absorption, have a sense of a community, and be connected to things larger than themselves. In other words, secular humanists and atheists can assent to most of what many religious people think religion is all about. From a secular humanist's point of view, in contrast, what's distinctive about religion is its commitment to the existence of supernatural entities as well as formal religious institutions and doctrines. And they're right. These things really do distinguish religious from non-religious practices, though they may appear to be secondary to many people operating from within a religious point of view. In the same way, I believe that most of **the standard deontological/Kantian self-characterizatons fail to distinguish deontology from other approaches to ethics**. (See also Kagan (Kagan, 1997, pp. 70-78.) on the difficulty of defining deontology.) It seems to me that **consequentialists**, as much as anyone else, **have respect for persons**, **are against treating people as mere objects,** **wish to act for reasons that rational creatures can share, etc**. **A consequentialist respects other persons, and refrains from treating them as mere objects, by counting every person's well-being in the decision-making process**. **Likewise, a consequentialist attempts to act according to reasons that rational creatures can share by acting according to principles that give equal weight to everyone's interests, i.e. that are impartial**. This is not to say that consequentialists and deontologists don't differ. They do. It's just that the real differences may not be what deontologists often take them to be. What, then, distinguishes deontology from other kinds of moral thought? A good strategy for answering this question is to start with concrete disagreements between deontologists and others (such as consequentialists) and then work backward in search of deeper principles. This is what I've attempted to do with the trolley and footbridge cases, and other instances in which deontologists and consequentialists disagree. **If you ask a deontologically-minded person why it's wrong to push someone in front of speeding trolley in order to save five others, you will get** characteristically deontological **answers**. Some **will be tautological**: **"Because it's murder!"** **Others will be more sophisticated: "The ends don't justify the means**." "You have to respect people's rights." **But**, as we know, **these answers don't really explain anything**, because **if you give the same people** (on different occasions) **the trolley case** or the loop case (See above), **they'll make the opposite judgment**, even though their initial explanation concerning the footbridge case applies equally well to one or both of these cases. **Talk about rights, respect for persons, and reasons we can share are natural attempts to explain, in "cognitive" terms, what we feel when we find ourselves having emotionally driven intuitions that are odds with the cold calculus of consequentialism**. Although these explanations are inevitably incomplete, **there seems to be "something deeply right" about them because they give voice to powerful moral emotions**. **But, as with many religious people's accounts of what's essential to religion, they don't really explain what's distinctive about the philosophy in question**.

#### 3] Their framing presupposes the value of reason – focus on the material aspects of the world – proves that reason is just experience, justifies util

Yudkowsky 7 – (Eliezer Yudkowsky, AI theorist, rationalist philosopher, “A Priori”, LessWrong, October 8, 2007, Available Online at <https://www.lesswrong.com/posts/qmqLxvtsPzZ2s6mpY/a-priori>, accessed 7-20-18, HKR-AM)

If you are a philosopher whose daily work is to write papers, criticize other people's papers, and respond to others' criticisms of your own papers, then you may look at Occam's Razor and shrug. Here is an end to justifying, arguing and convincing. You decide to call a truce on writing papers; if your fellow philosophers do not demand justification for your un-arguable beliefs, you will not demand justification for theirs. And as the symbol of your treaty, your white flag, you use the phrase "a priori truth". But to a Bayesian, in this era of cognitive science and evolutionary biology and Artificial Intelligence, saying "a priori" doesn't explain why the brain-engine runs. If the brain has an amazing "a priori truth factory" that works to produce accurate beliefs, it makes you wonder why a thirsty hunter-gatherer can't use the "a priori truth factory" to locate drinkable water. It makes you wonder why eyes evolved in the first place, if there are ways to produce accurate beliefs without looking at things. James R. Newman said: "The fact that one apple added to one apple invariably gives two apples helps in the teaching of arithmetic, but has no bearing on the truth of the proposition that 1 + 1 = 2." The Internet Encyclopedia of Philosophy defines "a priori" propositions as those knowable independently of experience. Wikipedia quotes Hume: Relations of ideas are "discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe." You can see that 1 + 1 = 2 just by thinking about it, without looking at apples. But in this era of neurology, one ought to be aware that thoughts are existent in the universe; they are identical to the operation of brains. Material brains, real in the universe, composed of quarks in a single unified mathematical physics whose laws draw no border between the inside and outside of your skull. When you add 1 + 1 and get 2 by thinking, these thoughts are themselves embodied in flashes of neural patterns. In principle, we could observe, experientially, the exact same material events as they occurred within someone else's brain. It would require some advances in computational neurobiology and brain-computer interfacing, but in principle, it could be done. You could see someone else's engine operating materially, through material chains of cause and effect, to compute by "pure thought" that 1 + 1 = 2. How is observing this pattern in someone else's brain any different, as a way of knowing, from observing your own brain doing the same thing? When "pure thought" tells you that 1 + 1 = 2, "independently of any experience or observation", you are, in effect, observing your own brain as evidence. If this seems counterintuitive, try to see minds/brains as engines - an engine that collides the neural pattern for 1 and the neural pattern for 1 and gets the neural pattern for 2. If this engine works at all, then it should have the same output if it observes (with eyes and retina) a similar brain-engine carrying out a similar collision, and copies into itself the resulting pattern. In other words, for every form of a priori knowledge obtained by "pure thought", you are learning exactly the same thing you would learn if you saw an outside brain-engine carrying out the same pure flashes of neural activation. The engines are equivalent, the bottom-line outputs are equivalent, the belief-entanglements are the same. There is nothing you can know "a priori", which you could not know with equal validity by observing the chemical release of neurotransmitters within some outside brain. What do you think you are, dear reader? This is why you can predict the result of adding 1 apple and 1 apple by imagining it first in your mind, or punch "3 x 4" into a calculator to predict the result of imagining 4 rows with 3 apples per row. You and the apple exist within a boundary-less unified physical process, and one part may echo another. Are the sort of neural flashes that philosophers label "a priori beliefs", arbitrary? Many AI algorithms function better with "regularization" that biases the solution space toward simpler solutions. But the regularized algorithms are themselves more complex; they contain an extra line of code (or 1000 extra lines) compared to unregularized algorithms. The human brain is biased toward simplicity, and we think more efficiently thereby. If you press the Ignore button at this point, you're left with a complex brain that exists for no reason and works for no reason. So don't try to tell me that "a priori" beliefs are arbitrary, because they sure aren't generated by rolling random numbers. (What does the adjective "arbitrary" mean, anyway?) You can't excuse calling a proposition "a priori" by pointing out that other philosophers are having trouble justifying their propositions. If a philosopher fails to explain something, this fact cannot supply electricity to a refrigerator, nor act as a magical factory for accurate beliefs. There's no truce, no white flag, until you understand why the engine works. If you clear your mind of justification, of argument, then it seems obvious why Occam's Razor works in practice: we live in a simple world, a low-entropy universe in which there are short explanations to be found. "But," you cry, "why is the universe itself orderly?" This I do not know, but it is what I see as the next mystery to be explained. This is not the same question as "How do I argue Occam's Razor to a hypothetical debater who has not already accepted it?" Perhaps you cannot argue anything to a hypothetical debater who has not accepted Occam's Razor, just as you cannot argue anything to a rock. A mind needs a certain amount of dynamic structure to be an argument-acceptor. If a mind doesn't implement Modus Ponens, it can accept "A" and "A->B" all day long without ever producing "B". How do you justify Modus Ponens to a mind that hasn't accepted it? How do you argue a rock into becoming a mind? Brains evolved from non-brainy matter by natural selection; they were not justified into existence by arguing with an ideal philosophy student of perfect emptiness. This does not make our judgments meaningless. A brain-engine can work correctly, producing accurate beliefs, even if it was merely built - by human hands or cumulative stochastic selection pressures - rather than argued into existence. But to be satisfied by this answer, one must see rationality in terms of engines, rather than arguments.

## CP

#### CP: States creating significant subsidies to create terrestrially accessible blockchain verification computing centers and cryptocurrency mining centers on the Moon is just. The appropriation of outer space by private entities in all other instances is unjust.

#### Solves lunar heritage

#### Climate-motivated terrestrial mining regulations kill crypto now – those don’t get applied to space because of unique environments – that saves crypto with sufficient private investment

Greene 21 Greene, Tristan. Tristan covers human-centric artificial intelligence advances, quantum computing, STEM, Spiderman, physics, and space stuff. As far as I can tell his highest level of education was that he was in the Navy for a while. "What happens to Bitcoin when billionaires build cryptocurrency miners on the Moon?" TNW | Hardfork, 8 June 2021, thenextweb.com/news/bitcoin-billionaires-build-cryptocurrency-miners-on-moon-bitcoin.

Space exploration and exploitation have traditionally been nationalist endeavors. But the rise of the 12-digit billionaire has suddenly made outer space look like open territory. The players Jeff Bezos is stepping down from his position as the CEO of Amazon after 25 years ahead of his imminent launch into space aboard one of his own Blue Origin spaceships. This will be the future of fintech 6 trends that will dominate fintech in 2022 While it’s easy to imagine the long-time leader retiring to live out a childhood fantasy, there’s nothing in Bezos’ history as an incredibly ambitious person and businessman to indicate his he’ll just blast off into the sunset to live a life of quiet leisure. Simply put, Bezos’ interest in the space sector likely won’t end with offering consumer thrill rides. While it’s impossible to know where the soon-to-be-former CEO might take his ambition, it’s likely Amazon and/or Blue Origin is already looking for ways to exploit the space sector for profit. But, obviously, Bezos isn’t the only private citizen with a spaceship company. Elon Musk’s SpaceX has spent the last decade becoming the belle of NASA’s ball and he’s already all-in on the idea of sending humans to Mars. And we can’t forget Richard Branson. He may only be worth a paltry $5 billion (lol), but his Virgin Galactic company’s been banking on making some money in space tourism for a long time. Let’s also not forget that Virgin’s dabbled in everything from railroad technology to record labels. And the list goes on. Anyone with a few billion dollars has business options and opportunities that extend beyond our planet’s surface. Space for profit In the past, we’ve discussed the idea of mining space asteroids for profit. Some experts believe there are unimaginable fortunes floating around in space in the form of resource-rich asteroids. In fact, you can even get a degree in asteroid mining. And even Goldman Sachs has considered getting in on the action. But, at the end of the day, we still have to figure out where these resources are, build machines capable of extracting them, and get them safely to somewhere they can be useful. Right now, there’s not much value in investing in asteroid mining futures because the technology either doesn’t exist or isn’t ready yet. However, there’s more than one kind of mining you can do in space. Enter cryptocurrency and the future Elon Musk recently got involved in a friendly space race, but this time it has nothing to do with competition over rockets or government contracts. He’s racing against BitMEX, a cryptocurrency exchange and derivative platform, to see who can get a cryptocurrency on the Moon first. If you’re curious about how that works, here’s a snippet from BitMEX’s official announcement: BitMEX will mint a one-of-a-kind physical bitcoin, similar to the Casascius coins of 2013, which will be delivered to the Moon by Astrobotic. The coin will hold one bitcoin at an address to be publicly released, underneath a tamper-evident hologram covering. The coin will proudly display the BitMEX name, the mission name, the date it was minted and the bitcoin price at the time of minting. According to BitMEX, this isn’t just a ceremonial or token delivery. The coin itself is a hardware wallet containing an actual Bitcoin, so its value will change with the value of the BTC here on Earth. In other words, BitMEX is sending a literal treasure to the Moon for anyone brave (or rich) enough to retrieve it. Per the company’s blog post: A moon surface background with text superimposed, quote below Credit: BitMEX Come and Get It. When the physical coin lands, it will remain on the Moon until anyone deems it worthy of retrieval. Decades from now, what will it be worth? It’s a great question. Some experts have predicted a single bitcoin will one day be worth $100K, $1M, or even more. But an even better question is this: What’s the end game for cryptocurrency in space? Billionaires want to be trillionaires Back in 1999 Wired ran a feature about the imminent rise of the world’s first trillionaire. At the time, everyone assumed the richest man in the world, Microsoft CEO Bill Gates, would be the first trillionaire by a long shot. Here’s a quote from that article: The value of Bill’s Microsoft stake has grown from $233.9 million at the time of Microsoft’s 1986 IPO to $72.2 billion as of June 15, 1999 (disregarding stock sales). At this rate – 58.2 percent a year – he will become a trillionaire in March 2005, at age 49, and his Microsoft holdings will be valued at $1 quadrillion in March 2020, when he is 64. Of course, we still haven’t seen a trillionaire in modern history. As of the time of this writing, the richest person in the world is France’s Bernard Arnault, whose $193.6 billion empire edges out Jeff Bezos’ $189 billion. At some point, if Bezos wants to pull away with it or Elon Musk wants to close the widening gap between his $151.4 billion and a first place finish, the world’s richest people are going to have to do more than squeeze terrestrial markets for every last drop of profit. That’s why many experts view Elon Musk’s heavy involvement in cryptocurrency as the potential difference maker. On any given day the Tesla, SpaceX, and Neuralink founder’s total worth can skyrocket or plummet by tens of billions of dollars based on how his cryptocurrency holdings are performing. When you consider that market movements can be directly tied to Musk’s social media statements, the power proposition for billionaires holding cryptocurrency is unbridled. Simply put: Elon Musk has more control over the so-called “volatile” world of cryptocurrency than most. Putting a cryptocurrency in space, much like firing a Tesla off into the galaxy, is a PR move meant to generate interest in the burgeoning cryptomarket. But that’s not the only purpose they serve. These acts remind us that people like Musk and Bezos can do anything they want. If they want to put a coin on the Moon, they have the means to do it. And, for example, if Musk or Bezos suddenly wanted to solve the biggest problems with cryptocurrency mining – power consumption, carbon footprint, developing powerful-enough hardware – they’re in a unique position to do so. In space, no one can hear you mine Arguably, one of the biggest things stopping an apex whale like Elon Musk from spending a fair portion of his billions on cryptomining centers is the fact that such an operation would almost certainly draw universal condemnation for its potential effect on the global climate crisis. But the Moon’s atmosphere isn’t necessarily as fragile as the Earth’s. Hypothetically speaking, there’s nothing to stop a billionaire from building a facility on the Moon to mine cryptocurrency. They would, of course, need to be able to build their own batteries, have experience with artificial intelligence and supercomputers, and already have their own satellite network set up in space – all boxes Elon Musk can tick today. And, in the near-future, as we perfect deep space transmission technology, what’s to stop a billionaire from putting a supercomputer on a satellite and sending it somewhere in deep space to mine cryptocurrency 24/7 at near absolute-zero temperatures? All of this is conjecture, but the writing is on the wall. Cryptocurrency enthusiasts fear what the experts are consistently warning: regulation is coming. Eventually, it’s possible cryptocurrency mining could become regulated with harsh policies designed to keep mining operations from further damaging the environment. This could seriously hinder the market. If humanity walks away from terrestrial mining to save the planet, we’ll be leaving unfathomable amounts of money on table. Billionaires don’t become billionaires by doing that. The only logical path forward, barring some unknown new green mining technology, may be moving the cryptocurrency industry to space.

#### Cryptocurrency reach a wide rollout---that builds resilience to survive inevitable existential filters.

Alex McShane 21, Writer and Head of Video for Bitcoin Magazine, BA from the University of Iowa, Degree from the University College Dublin, Degree from Kirkwood Community College, “Bitcoin and Existential Risk”, Bitcoin Magazine, 9/5/2021, https://bitcoinmagazine.com/culture/bitcoin-and-existential-risk-alex-mcshane

TL;DR - An existential risk is the possibility of an event or series of events that could drastically curtail humanity’s potential. A hypothetical global catastrophe could be anthropogenic or non-anthropogenic and internal or external in nature. The adoption of Bitcoin will better position us to address these risks as a society.

EXTERNAL NON-ANTHROPOGENIC

A catastrophic collision with an astronomical object, such as an asteroid impact would be an external non-anthropogenic risk. This has already occurred here several times. During the Permian Triassic period (ending 250 million years ago) an astronomical impact killed 90 percent of the species on Earth. It took tens of millions of years for life on Earth to repopulate and Earth’s intelligence potential to recover.

One interesting external non-anthropogenic risk is Earth’s reflected light, which could be measured by an external intelligence who then come to extinguish us. (The topic of our own signal bringing about this death by misadventure is discussed further below.)

What does this have to do with Bitcoin?

Generally, hard money facilitates greater innovation and technological process. At this point one might argue that if we do not migrate to some degree from Earth as a species, and are subsequently wiped out by an astronomical object impact or a super-volcanic event, the risk becomes anthropogenic in nature. We are a centralized species on a grand scale, and at this point one could say we have through consensus chosen to remain vulnerable to a single vector of attack by staying here.

Bitcoin is not only the hardest money known to man, it is the most responsible from this standpoint. Bitcoin as it currently operates is currency that can provide a monetary framework on which humans can achieve greater capital growth, collaboration, resource allocation, and therefore technological progress. Because the terminal supply of Bitcoin is capped, we can store value in it indefinitely as a society.

66 Million years ago the Cretaceous-Paleogene Extinction Event extinguished the life and intelligence potential of the non-avian dinosaurs. This series of events was external, and broadly non-anthropogenic in the sense that no form of life on Earth at the time contributed to its own demise, but more specifically, at the time of those astronomical impacts the first humans hadn’t split from chimpanzee lineages. This split is thought to have occurred between between 4 and 8 million years ago.

An important distinction between astronomical impacts or super-volcanic events of the past and such events if they were to happen today is that one could argue that our intelligence potential is now mature enough to tackle certain of the external existential risks. Today, the risk posed by an asteroid impact or something similar would still be external in its origin, but at what point does the burden of responsibility to migrate off of the planet fall upon our population? We can surely solve for some external existential risks, and in any case, no one is going to do it for us. You could say that failing to collectively pursue a solution when technically we could have would recategorize a civilization-extinguishing asteroid impact as an external but anthropogenic risk.

At what point do innovation dampening authoritarian states and their mandated broken money cause society to stall at a local optimum? Surely the government has already caused this. It’s only a matter of time before another object strikes the Earth with devastating consequence. I would argue it is irresponsible to continue life here with government money. Government money is an existential risk. Bitcoin is not only a solution, it is a societal responsibility.

INTERNAL ANTHROPOGENIC

Nuclear war is one example of an internal anthropogenic risk. That is, should nuclear war arise, it would be both self destructive, and relatively self contained on a cosmic scale. It follows that biological warfare is an internal anthropogenic risk, the reality of which we as a species can surely understand now. If I were to hazard a guess I would say virtual emergencies and cyber pandemics are next. These self constructed catastrophes are the government’s misguided attempts at proof of work. This is a topic for another time. Do not surrender your ability to think and speak freely.

The second law of thermodynamics can summed thus, processes that involve the transfer or conversion of heat energy are irreversible. The law indicates we have not observed a spontaneous transfer of energy from cold to hot. Another way to think of this is that there is no such thing as cold, only lesser degrees of hot. Nothing cannot transfer. So broadly, within a closed system, the second law of thermodynamics would indicate that all differences tend to level out.

So what has this got to do with Bitcoin?

Well firstly, all hardware is subject to entropy. The distributed nature of the blockchain increases the probability that it will survive centralized entropy. At Bitcoin’s inception, imagine a failure because Satoshi’s computer randomly crashed. Distributed networks are inherently hedged against this particular centralized form of existential risk.

The second law of thermodynamics also suggests that on a grander scale, relatively isolated (centralized) systems will degenerate more and more into disordered states. Proof of work, and network growth are two ways Bitcoin fights against falling into disrepair.

Bitcoin uses proof of work to stave off entropy. The system cannot stay dormant. It must continue to use proof of work to advance the state of the chain, and to fight entropy to secure the monetary value all of the users have stored in the network. The U.S. dollar, as many have pointed out, relies on proof of war, or distributed political energies to maintain dominance. Its methodology can be described as haphazard at best.

INTERNAL NON-ANTHROPOGENIC

One internal non-anthropogenic risk is that of a super-volcanic eruption, provided it wasn’t humans who brought about the eruption. Just like with external non-anthropogenic risks, Bitcoin alone cannot prevent them, but it can help humans prepare for them such that we may survive these relatively small intelligence filters the universe throws our way.

Bitcoin allows for fundamental capital accumulation and human innovation, and promotes collaboration to such a degree that we will find an increased collective problem solving power as humans the further Bitcoin adoption spreads. It is worth mentioning that Bitcoin also maintains and appreciates wealth to such a degree that often those of us to chose to live our lives on a Bitcoin standard will experience relatively greater freedoms, and vastly greater amounts of free time than our peers who chose to continue their lives on a fiat standard, and are perpetually working to outpace their chronic debt. Many Bitcoiners will likely forego that newfound free time to work and continue to provide value to others in whatever area interests them, because Bitcoin incentivizes the collaborative accumulation of capital but also the responsible reallocation of it.

EXTERNAL ANTHROPOGENIC

An external anthropogenic risk has the least probability of occurring. This is a problem of reach. Imagine human intelligence being sent into the cosmos and signaling or generally causing an external intelligence or astronomical object to come back to extinguish us. This is a most improbable extinction by misadventure.

The probability that we send messages of consequence into the cosmos that in turn cause some other far-flung intelligence, with knowledge enough to reach us, to come and bring about our own destruction is next to zero, but it isn’t zero.

I would posit that the probability increases every day that Bitcoin survives, with each person that chooses to hold Bitcoin over fiat, because on a fiat standard we are again, stuck at a local optimum at best, and each day the global monetary system devolves further into chaos. The fiat world may continue to be habitable chaos, but our technological progress and our greatest capacity for innovation cannot be achieved on a fiat standard.

A Bitcoin standard is not only our current best bet, it is the only monetary vehicle that will take us from here, or enable us to build technology that can effectively communicate with places in the universe where other intelligence has emerged. The other reason this fatal miscommunication is unlikely to occur is that once through a Bitcoin standard we have manage to build a society that can effectively reach and communicate at greater depths of the cosmos we will at that time have already become a multi-planetary, if not transitory, if not multi-solar system species. The topic of Bitcoin in space and planetary interoperability will be discussed in a later essay.

The most distant human made object from the earth is the Voyager 1, which is over 13 billion miles away. (For perspective, Apha Centuri, the nearest star system to Earth, is 25 trillion miles away.) Human radio signals have announced our presence and our intelligence to the cosmos since around 1900. The first human radio signals have all ready traveled 114 light years, that is 681,920,540,000,000 miles. Although the reach of our radio signals is very great, the probability of us being heard and subsequently extinguished is negligible. External anthropogenic risks are the least of our concerns at the moment.

As Bitcoin adoption grows, it serves to promote advances in artificial intelligence and nanotechnology. External anthropogenic risks will become more relevant to human intelligence at a much later time. External non-anthropogenic risks are similarly out of our hands for the time being. That is, at the moment there is nothing we can do to prevent the Sun from becoming a red giant star and subsuming the Earth.

But we do already have the monetary technology upon which to engineer solutions to some of these problems. We have the potential as humans to prevent internal global catastrophes, both those set on by us and not. Survival and longevity is arguably our greatest task as a species. Adopting Bitcoin, and protecting this network is proceeding with diligence and a long eye toward the future in all of our political and scientific affairs. The existential risks of living are great, though it is human nature for our ambitions to out pace our current abilities. The only evidence of life is change. To change is to exit fiat currency, it is to use Bitcoin instead.

# Case

## Framing

#### Top level, extinction outweighs under Kant – killing everyone means that all freedom gets gutted

#### No ev that there’s an evil demon – only a risk that there isn’t and everyone would experience great levels of pain and a loss of agency from death

#### Util could be a different answer to bindingness

#### Consequences still relevant on top of intentions

#### Util also appeals to reason

#### Util is more practical than Kant for practical reason

#### Universalizability test in the categorical imperative requires considering universal consequences of any particular action - devolves to consequentialism

#### We can still speak and perform the aff and neg given the aff impacts

#### Probability solves infinite consequences, induction empirically not circular, aggregation for extinction is very possible, probability solves predictions impossible as well, we can predict consequences to determine whether something should be done or not

#### Yes reason to act ethically because people predict the otucomes of their actions

#### No reason a non-free life is worse than death – independently, their impact isn’t that everyone is not free

#### No impact to an intent-foresight distcintion because we should still prevent bad consequences

## Advantage

#### no ev that says that a] privaate space appropriation ruins moon dust experiments – we can still create heritage sites and still experiment on the moon in the neg – the public sector can still do these things

## Kant Contention

#### On Green 14, there’s no reason a] aliens are rational or b] aliens claim rights over celestial bodies

#### Omnilateral frameworks don’t matter given that they haven’t justified the omnilateral will

#### Space exploration is not an ethical maxim – it’s an action – proves universalizability is irrelevant

#### External conditions aren’t relevant to freedom – we can still imagine that something could happen

#### Outer space includes the asteroids in space

Vereshchetin 06 [Vladlen, former Member of the ICJ, Chairman of the International Law Commission, and Professor of International Law] “Outer Space,” Max Planck Encyclopedia of Public International Law, <https://spacelaw.univie.ac.at/fileadmin/user_upload/p_spacelaw/EPIL_Outer_Space.pdf>, 2006 RE

A. Definition of the Term ‘Outer Space’

1 The term ‘outer space’, like several other basic notions of space law (‘outer space activity’, ‘space flight’, ‘space object’), although frequently used in space agreements and other space law instruments, has never been defined by them. There are a number of reasons for this, not least the objective difficulty for the States concerned to agree on legal definitions in the context of rapidly developing technology and their apprehension that legally binding definitions might restrict their sphere of operation.

2 The absence of a formal definition of outer space does not mean that no general perception exists as to what is meant by outer space, even if the use of the term in natural sciences and in law may not always be exactly the same. It should be remembered that there is no definitive physical boundary between atmospheric space and extra-atmospheric space, the transition from one to the other being gradual. Although at 100 km the density of the air is but one millionth of what it is at sea level, for natural scientists these two regions of space, in some respects, may be perceived as one single whole. However, with the launching of the first satellite in 1957 the notion of outer space became inextricably linked with the exploration and uses of space by means of man-made spacecraft (→ Spacecraft, Satellites, and Space Objects). The physical and technical factors are directly relevant to the legal regulation of the region of space concerned. The atmospheric space of the earth and most of the activities in this space fall within the ambit of → Air Law. The space beyond the atmosphere is governed by space law. The ‘spatial’ element of each of the two above-mentioned branches of law is reflected in their denominations: the first being known as air (ie atmospheric) law, the second as space law, often referred to as outer space (ie extra-atmospheric) law.

3 The legal regimes governing → airspace and outer space are fundamentally different. Thus, logically and jurisprudentially it is necessary to know where air space ends and outer space begins. In theory, there must be no ‘outer’ boundary of application of space law, since outer space itself is limitless, but in practice space law, keeping pace with the development of space technology, does not purport to regulate space activity beyond the solar system (see Art. 1 Agreement Governing the Activities of State on the Moon and Other Celestial Bodies [(adopted 18 December 1979, entered into force 11 July 1984) 1363 UNTS 3]). At the same time, ‘celestial bodies’ of the solar system, other than the earth, but comprising the Moon, are included in the legal notion of outer space (→ Moon and Celestial Bodies). This follows from the title and text of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies ([signed 27 January 1967, entered into force 10 October 1967] 610 UNTS 205) (‘Outer Space Treaty’).

#### And, libertarianism turns case—efficiency and effectiveness due to enhanced caution and competition.

Bicksler 09 [James, Professor in Finance and Economic at Rutgers University at the Rutgers Business School, International Journal of Disclosure and Governance].Classical libertarianism: The economic perspectives of Milton Friedman including his likely views on the ‘proper’ role of government in the subprime mortgage debacle, 2009, Volume 6 Issue 1 - <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=5252cd7e-08a6-444c-a768-64b61efc7de3%40sessionmgr15&vid=4&hid=18>. 2009.]

Friedman describes the essence of libertarianism as ‘ free private property capitalism ’ . With regard to private property, Friedrich A. Hayek is of the opinion that ‘ private property ’ is the most important guarantee of freedom. Further, Milton Friedman has stated, ‘ you can ’ t have a free society without private property ’ . Translated, Friedman ’ s libertarian framework is that economic and political freedoms are best and, perhaps, can only be achieved via institutions and markets that maximise the welfare of each individual party to the transaction, as judged by each individual party to the transaction and the transaction taking place in competitive markets where there is individual ownership of property rights. Note that much of the rationale for emphasising individual decision making in a private property economy is captured in Milton Friedman ’ s view that ‘ Nobody spends somebody else ’ s resources as carefully as he uses his own. So if you want efficiency and effectiveness, if you want knowledge to be properly utilised, you have to do it through the means of private property ’ . This means, as Friedman states, that ‘ the organization of the bulk of economic activity through private enterprise operating in a free market promotes economic welfare and political freedom ’ . The primary end results of competitive markets dominated by self-interested individuals are enhanced efficient resource allocation at the level of both the firm and the household, and the enhancement of the real growth of the economy. 16,17 This reasoning goes back to Adam Smith ’ s seminal Wealth of Nations (1776), where Smith argued that the invisible hand of self-interested individuals promoted what was best for society. 18,19 Specifically, Adam Smith stated that ‘ he intends only his own gain, and he is in this as in many other cases led by an invisible hand to promote an end which was not part of his intention ’ . That is, ‘ It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest ’ . Alternatively stated, the essence of all of Milton Friedman ’ s public policy prescriptions was the demonstration via arguments of price theory that if there is an efficient allocation of resources at the firm level, it results in lower market clearing prices in competitive markets and these gains accrue to the benefit of individuals. Further, competitive markets encourage entrepreneurial and innovative activity which results in an expanded opportunity set of choices for consumers

which again is a gain for society. This means that, in general, private markets are to be preferred to governmental regulated markets because they have superiority in allocating scarce resources. Certainly, private markets, if they are competitive markets, are to be preferred, without exception, to governmental regulated markets because they have superiority in allocating scarce resources. 22 – 26 Adam Smith ’ s viewpoint of self-interested individuals operating in competitive markets, leading to enhanced resources allocation and societal economic gains differs markedly from the then prevailing mercantilistic structure of the economy. 27 In mercantilism, there is a government / monarchy that focuses on a nation ’ s economic goals, particularly on export-balance of payment goals, and where there is zero focus and emphasis on enhancing opportunities for individuals and on individual self-interest.

#### Rationality has historically been a tool used by Western thinkers to invent fundamental differences between Europe and the rest of humanity in order to justify the inferiority of non-white peoples – means that you must use consequences Eze 97

Eze 97 Emmanuel Chukwudi Eze [African philosophy: an anthology. “Modern Western Philosophy and African Colonialism.”1997]

When Western philosophy speaks of "reason." It is not just speaking of "science" and "knowledge" and "method," and "critique," or even "thought." In and through these codes it is more fundamentally the question of the "anthropos," of the human, that is at stake, for questions of knowledge and identity, logos and anthropos, always hang together. It is within this background of anthropos as logikos the interlacing of human understanding and the understanding of the human, that Europeans originally introduced the notion of a difference in kind between themselves and Africans as a way of justifying unspeakable exploitation and denigration of Africans.

#### I contend that the appropriation of outer space resources by private entities is a just expression of property rights.

Hoppe 02 [(Hoppe, Hans-Hermann. Economics and Ethics of Private Property. Ludwig von Mises Institute, 2006.] \*edited for gendered language

And **if a person were not permitted to acquire property in** these **goods and spaces by means of** an act of original **appropriation, i.e., by establishing a**n objective (intersubjectively ascertainable) **link between [themselves]** himself **and a particular good and/or space prior to anyone else**, **but if instead property** in such goods or spaces **were granted to late-comers, then no one would** **be permitted to** ever **begin using any good unless [they]** he **had previously secured such late-comers’ consent**. **Yet how can a late-comer consent to the actions of an early-comer?** **Moreover, every late-comer would in turn need the consent of other still later-comers, and so on**. That is, neither we, nor our forefathers, nor our progeny would have been or will be able to survive if one were to follow this rule. However, in order for any person—past, present, or future—to argue anything it must be possible to survive then and now, and in order to do just this **property rights cannot be conceived of as being timeless and unspecific** with respect to the number of persons concerned. **Rather, property rights must necessarily be conceived of as originating as a result of definite individuals acting at definite points in time and space.** Otherwise, it would be impossible for anyone to ever say anything at a definite point in time and space and for someone else to be able to reply. **Simply saying that the first-user-first-owner rule of** the ethics of **private property can be ignored or is unjustified** **implies a performative contradiction, for one’s being able to say so must presuppose one’s existence as an independent decision-making unit at a given point in time and space.**

#### Any other conception of property violates the categorical imperative, turns the case, and justifies infinite freedom violations

Exdell 77 [John Prof. of Philosophy Kansas State University in Ethics [“Distributive Justice: Nozick on Property Rights” Ethics, Vol. 87, No. 2 (Jan., 1977), pp. 142-149]

The doctrine that land and resources are collectively held stands as the most ¶ prominent rival to Nozick's theory. If this alternative proves to be indefensible, ¶ Nozick's position is strengthened considerably. Nozick himself raises only one objection¶ to the idea of communal holdings. He addresses proponents of the ¶ doctrine with the following challenge: "We should note that it is not only persons ¶ favoring private property who need a theory of how property rights legitimately ¶ originate. Those believing in collective property, for example those believing that ¶ a group of persons living in an area jointly own the territory, or its mineral ¶ resources, also must provide a theory of how such property rights arise; they must ¶ show why the persons living there have rights to determine what is done with the ¶ land and resources there that persons living elsewhere don't have (with regard to ¶ the same land and resources)."" Nozick is asking here that adherents of the ¶ communalist view explain, for example, how [can] the American people can claim the ¶ Kansas wheat fields as their own. Why should we not say instead that this treasure ¶ belongs, say, to the people of Venezuela? One may be tempted to reply: "The ¶ American people can claim the wheat field because they are the ones who have ¶ invested their lives and fortunes in the development of the land and resources ¶ within their national boundaries." To take this view, however, is to accept[s] the ¶ Lockean principle of acquisition. And then one can be forced to concede that it is ¶ not, after all, the American people who are entitled to the Kansas wheat fields, but ¶ those individuals who did in fact invest their labor in the development of these ¶ lands, or who purchased them from those who did. Thus it is difficult to see how ¶ we can reject a Venezuelan claim to American natural resources without accepting ¶ a principle that justifies private ownership. Communal ownership is squeezed out ¶ of the picture. ¶