# 1AC

### FWK

#### I affirm:

#### Pain is bad, Pleasure is good, and all things only have value insofar as they make us happy.

Ole Martin Moen, Post-Doctoral Fellow in Philosophy at Centre for the Study of Mind in Nature, University of Oslo, 12 September 2015, <http://www.olemartinmoen.com/wp-content/uploads/AnArgumentForHedonism.pdf> ///AHS PB

Let us start by observing, empirically, that a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues. This inclusion makes intuitive sense, moreover, for there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. ‘‘Pleasure’’ and ‘‘pain’’ are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values. If you tell me that you are heading for the convenience store, I might ask: ‘‘What for?’’ This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable. You might answer, for example: ‘‘To buy soda.’’ This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: ‘‘What is buying the soda good for?’’ This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: ‘‘Well, I want it for the pleasure of drinking it.’’ If I then proceed by asking ‘‘But what is the pleasure of drinking the soda good for?’’ the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.3 As Aristotle observes: ‘‘We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.’’4 Presumably, a similar story can be told in the case of pains, for if someone says ‘‘This is painful!’’ we never respond by asking: ‘‘And why is that a problem?’’ We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that pleasure and pain are both places where we reach the end of the line in matters of value.

**He Continues**

Many philosophers would accept the conclusion from the previous section, that pleasure is intrinsically valuable and pain is intrinsically disvaluable. Most of them would add, however, that this is probably not the complete story of what is intrinsically valuable and disvaluable. They would suggest that there are intrinsic values besides pleasure and intrinsic disvalues besides pain, and thus endorse some form of pluralism rather than hedonism. Pluralism has many defenders. W. D. Ross, for example, suggests that pleasure is indeed intrinsically valuable, but adds that so are knowledge and artistic activity.19 Noah Lemos adds consciousness, morally good actions, beauty, and flourishing to the list of intrinsic values.20 Martha Nussbaum suggests life, health, bodily integrity, emotional attachment, practical reason, affiliation, play, and more.21 William Frankena has provided what is arguably the most extensive list of intrinsic values: life, consciousness, and activity; health and strength; pleasures and satisfactions of all or certain kinds; happiness, beatitude, contentment, etc.; truth; knowledge and true opinions of various kinds, understanding, wisdom; beauty, harmony, proportion in objects contemplated; aesthetic experience; morally good dispositions or virtues; mutual affection, love, friendship, cooperation; just distribution of goods and evils; harmony and proportion in one’s own life; power and experiences of achievement; self-expression; freedom; peace, security; adventure and novelty; and good reputation, honor, esteem.22 Prima facie, these all seem to be reasonable suggestions for things worth having, not just for the sake of other things, but for their own sake. So is it clear, as G. E. Moore asks, that a hedonist can show ‘‘that all other things but pleasure, whether conduct or virtue of knowledge, whether life or nature or beauty, are only good as a means to pleasure or for the sake of pleasure, never for their own sakes or as ends in themselves’’?23 I think several things should be said in response to Moore’s challenge to hedonists. First, I do not think the burden of proof lies on hedonists to explain why the additional values are not intrinsic values. If someone claims that X is intrinsically valuable, this is a substantive, positive claim, and it lies on him or her to explain why we should believe that X is in fact intrinsically valuable. Possibly, this could be done through thought experiments analogous to those employed in the previous section. Second, there is something peculiar about the list of additional intrinsic values that counts in hedonism’s favor: the listed values have a strong tendency to be well explained as things that help promote pleasure and avert pain. To go through Frankena’s list, life and consciousness are necessary presuppositions for pleasure; activity, health, and strength bring about pleasure; and happiness, beatitude, and contentment are regarded by Frankena himself as ‘‘pleasures and satisfactions.’’ The same is arguably true of beauty, harmony, and ‘‘proportion in objects contemplated,’’ and also of affection, friendship, harmony, and proportion in life, experiences of achievement, adventure and novelty, self-expression, good reputation, honor and esteem. Other things on Frankena’s list, such as understanding, wisdom, freedom, peace, and security, although they are perhaps not themselves pleasurable, are important means to achieve a happy life, and as such, they are things that hedonists would value highly. Morally good dispositions and virtues, cooperation, and just distribution of goods and evils, moreover, are things that, on a collective level, contribute a happy society, and thus the traits that would be promoted and cultivated if this were something sought after. To a very large extent, the intrinsic values suggested by pluralists tend to be hedonic instrumental values. Indeed, pluralists’ suggested intrinsic values all point toward pleasure, for while the other values are reasonably explainable as a means toward pleasure, pleasure itself is not reasonably explainable as a means toward the other values. Some have noticed this. Moore himself, for example, writes that though his pluralistic theory of intrinsic value is opposed to hedonism, its application would, in practice, look very much like hedonism’s: ‘‘Hedonists,’’ he writes ‘‘do, in general, recommend a course of conduct which is very similar to that which I should recommend.’’24 Ross writes that ‘‘[i]t is quite certain that by promoting virtue and knowledge we shall inevitably produce much more pleasant consciousness. These are, by general agreement, among the surest sources of happiness for their possessors.’’25 Roger Crisp observes that ‘‘those goods cited by non-hedonists are goods we often, indeed usually, enjoy.’’26 What Moore and Ross do not seem to notice is that their observations give rise to two reasons to reject pluralism and endorse hedonism. The first reason is that if the suggested non-hedonicintrinsic values are potentially explainable by appealtojust pleasure and pain (which, following my argument in the previous chapter, we should accept as intrinsically valuable and disvaluable), then—by appeal to Occam’s razor—we have at least a pro tanto reason to resist the introduction of any further intrinsic values and disvalues. It is ontologically more costly to posit a plurality ofintrinsic values and disvalues, so in case all values admit of explanation by reference to a single intrinsic value and a single intrinsic disvalue, we have reason to reject more complicated accounts. The fact that suggested non-hedonic intrinsic values tend to be hedonistic instrumental values does not, however, count in favor of hedonism solely in virtue of being most elegantly explained by hedonism; it also does so in virtue of creating an explanatory challenge for pluralists. The challenge can be phrased as the following question: If the non-hedonic values suggested by pluralists are truly intrinsic values in their own right, then why do they tend to point toward pleasure and away from pain?27

#### Thus the standard is Utilitarianism. Prefer:

#### [1] Util is a lexical pre-requisite to any other framework: Threats to bodily security and life preclude the ability for moral actors to effectively utilize and act upon other moral theories since they are in a constant state of crisis that inhibit the ideal moral conditions which other theories presuppose – so, util comes first and my offense outweighs theirs under their own framework.

#### [2] Only natural observable moral facts exist:

#### Papineau 07, David Papineau, “Naturalism,” Stanford Encyclopedia of Philosophy, 2007//SS Moore took this argument to show that moral facts comprise a distinct species of non-natural fact. However, any such non-naturalist view of morality faces immediate difficulties, deriving ultimately from the kind of causal closure thesis discussed above. If all physical effects are due to a limited range of natural causes, and if moral facts lie outside this range, then it follow that moral facts can never make any difference to what happens in the physical world (Harman, 1986). At first sight this may seem tolerable (perhaps moral facts indeed don't have any physical effects). But it has very awkward epistemological consequences. For beings like us, knowledge of the spatiotemporal world is mediated by physical processes involving our sense organs and cognitive systems. If moral facts cannot influence the physical world, then it is hard to see how we can have any knowledge of them

#### Proves Util since we physically know the pleasure is good and pain is bad.

#### [3] Actor-specificity: side constraints freeze action b/c government policies always require trade-offs—the only justifiable way to resolve those conflicts is by benefiting everyone.

**[4] THEORY: ethical frameworks must be theoretically legitimate. Any standard is an interpretation of the word ought-thus framework is functionally a topicality argument about how to define the terms of the resolution. Prefer my interpretation:**

**A] Ground: Both debaters are guaranteed access to ground to engage under util – ie Aff gets plans and advantages, while Neg gets disads and counterplans. Additionally, anything can function as a util impact as long as an external benefit is articulated, so all your offense applies. Other frameworks deny 1 side the ability to engage the other on both the impact level and the link level.**

**B] Predictability: Debaters are most prepared to engage in a util debate since it is the most common framework read on the entirety of the west coast. Hyper-specific theories will always mean people have little to no prep on the issue.**

### AC

#### Space Billionaires are abandoning the Earth, dooming us to environmental catastrophe.

**Stirone 21** - “Space Billionaires, Please Read the Room” By Shannon Stirone [<https://www.theatlantic.com/science/archive/2021/07/space-billionaires-jeff-bezos-richard-branson/619383/> ] // ahs emi

After Jeff Bezos, the world’s richest person, announced that he would join the first crewed flight by his rocket company, Blue Origin, later this month, Richard Branson just couldn’t let himself be outdone.\* So now Branson, merely the world’s 589th richest person, is joining the crew of his next Virgin Galactic flight on Sunday, nine days before Bezos goes vertical. All of this to go to “space.” Branson will go only about 50 miles up, where the military says space starts. Bezos will go 12 miles higher, just past the internationally recognized Karman Line, but he’ll be there for only four minutes. **Could there be a worse time for two über-rich rocket owners to take a quick jaunt toward the dark**? Especially in the United States, **the climate crisis is** now actually starting to feel like a crisis. **The western U.S. is in the thick of fire season, experiencing record-breaking drought and temperatures.** Last week, Bezos’s hometown of Seattle hit 108 degrees. **Hurricane season is starting early, and a once-in-200-years flood just ravaged northern Mississippi. Oh yeah, then there’s the pandemic that is very much still not over.** Anyone would want a break from this planet, but the billionaires are virtually the only ones who are able to leave. Leaving Earth right now isn’t just bad optics; it’s almost a scene out of a twisted B-list thriller: **The world is drowning and scorching, and two of the wealthiest men decide to ... race in their private rocket ships to see who can get to space a few days before the other.** If this were a movie, these men would be Gordon Gekko and Hal 9000—both venerated and hated. Maybe, I don’t know, delay the missions a bit until people around the world are no longer desperately waiting for vaccines to save them from a deadly virus. To their credit, the two billionaires aren’t totally oblivious. In recent years, Branson has proposed a climate dividend, while Bezos has pledged to spend $10 billion on climate efforts, though we still don’t know where most of that money will go. But given what humanity has been through in the past year and a half, I can’t help but wonder, what are they thinking? (I reached out to both Blue Origin and Virgin Galactic for comment and neither company responded. Branson has insisted that he is not in a competition with Bezos.) And it’s not just them that make this display feel so gross. Their fellow billionaire **Elon Musk (currently the No. 2 richest person, if you’re keeping track) may not be far behind in his own space travels and is in the midst of**[**ruining the night sky**](https://www.vox.com/science-and-health/2020/1/7/21003272/space-x-starlink-astronomy-light-pollution)**with his mega-constellation of satellites.** While Bezos and Branson will be in space—I mean, “space”—for just a few minutes, their departure is yet another reminder of all the other earthly things they can avoid that the rest of us can’t. **Billionaires** have purchased private islands, built underground bunkers, and gotten LASIK to prepare for not having glasses during the climate apocalypse. They can’t truly escape Earth now, and [they likely never will](https://www.theatlantic.com/ideas/archive/2021/02/mars-is-no-earth/618133/), but **they can avoid helping make this planet better.**

#### Space hype diverts intellectual resources from crises on Earth- it creates a self-fulfilling prophecy and exacerbates problems on Earth- including the destruction of the biosphere. We are on a one-way trip to extinction.

**Williams 10** - Lynda Williams “Irrational Dreams of Space Colonization” [https://www.tandfonline.com/doi/abs/10.1080/10402650903539828?journalCode=cper20] // ahs emi

**Life on Earth is more urgently threatened by the destruction of the biosphere and its life-sustaining habitat due to environmental catastrophes such as climate change, ocean acidification, disruption of the food chain, bio-warfare, nuclear war, nuclear winter, and myriads of other manmade doomsday possibilities. If we accept these threats as inevitabilities on par with real astronomical dangers and divert our natural, intellectual, political, and technological resources from solving these problems into escaping them, will we be playing into a self-fulfilling prophesy of our own planetary doom**? Seeking space-based solutions to our earthly problems may actually exacerbate the planetary threats we face. This is the core of the ethical dilemma posed by space colonization: should we put our resources into developing human colonies on other worlds to survive natural and manmade catastrophes, or should we focus all of our energies on solving and mitigating the problems that create these threats on Earth? What do the prospects of colonies or bases on the moon and Mars offer? **Both the moon and Mars host extreme environments that are uninhabitable to humans without very sophisticated technological life-support systems beyond any that are feasible now or will be available in the near future. Both bodies are subjected to deadly levels of solar radiation and are void of atmospheres that could sustain oxygen-based life forms such as humans. Terra-forming either body is not feasible with current technologies and within any reasonable time frames** (and may, in any case, be questioned from an ethical and fiscal point of view). Thus, any colony or base would be restricted to living in space capsules or trailer park-like structures that could not support a sufficient number of humans to perpetuate and sustain the species in any long-term manner. Although evidence of water has been discovered on both bodies, it exists in a form that is trapped in minerals, of soil to produce one ton of helium-3. (25 tons of helium-3 would be required to power the United States for one year.) Fusion also requires the very rare element tritium, which does not exist naturally on the moon, Mars, or Earth in the abundances needed to facilitate nuclear fusion energy production. Currently, there are no means for generating the energy on the moon needed to extract the helium-3 to produce the promised endless source of energy. Similar energy problems exist for the proposed use of solar power on the moon, which has the additional problem of being sunlit two weeks a month and dark for the other two weeks. moon base is envisioned as serving as a launch pad for Martian expeditions, so the infeasibility of a lunar base may prohibit trips to Mars, unless they are launched directly from Earth or via an orbiting space station. Mars is, in its closest approach, 36 million miles from Earth and would require a nine-month journey with astronauts exposed to deadly solar cosmic rays. Providing sufficient shielding would require a spacecraft that weighs so much that it becomes prohibitive to carry enough fuel for a roundtrip. Either the astronauts get exposed to lethal doses on a roundtrip, or they make a safe one-way journey and never return. Regardless, it is unlikely that anyone would survive a trip to Mars. Whether or not people are willing to make that sacrifice for the sake of scientific exploration, human missions to Mars do not guarantee the survival of the species, but rather, only the death of any member who attempts the journey. **The technological hurdles prohibiting practical space colonization of the moon and Mars in the near future are stratospherically high;** the environmental and political consequences of pursuing these lofty dreams are even higher. There are no international laws governing the moon or the protection of the space environment. The Moon Treaty, created in 1979Siddharthi by the United Nations, declares that the moon shall be developed to benefit all nations, that no military bases could be placed on the moon or on any celestial body, and bans altering the environment of celestial bodies. To date, no space-faring nation has ratified this treaty, meaning the moon, and all celestial bodies including Mars and asteroids, may be up for the taking. If a nation did place a military base on the moon, they could potentially control all launches from Earth. The moon is the ultimate military high ground. How can we, as a species, control the exploration, exploitation, and control of the moon and other celestial bodies if we cannot even commit to a legal regime to protect and share its resources? Since the space age began, the orbital environment around Earth has become crowded with satellites and space debris, so much so that circumterrestrial space has become a dangerous place with an increasing risk of collision and destruction. Thousands of pieces of space junk, created from past launches and space missions, orbit the Earth at the same distance as satellites, putting them at risk of collision. Every time a space mission is launched from Earth, debris from the rocket stages is added to orbital space. In 2009Virodhi, there was a disastrous collision between an Iridium satellite and a piece of space junk that destroyed the satellite. In 2007Sarvajeeth, China blew up one of its defunct satellites to demonstrate its antiballistic missile capabilities, increasing the debris field by 15 percent. The United States followed suit a few months later when, in February 2008Sarvahari, it used its ship-based antiballistic missile system to destroy one of its own satellites that had reportedly gone out of control. There are no international laws prohibiting antisatellite actions. Every year, since the mid-1980s Raudra through Shulka, a treaty has been introduced into the UN for a Prevention of an Arms Race in Outer Space (PAROS), with all parties, including Russia and China, voting for it, except for the United States and Israel. How can we hope to pursue peaceful and environmentally sound space exploration without international laws in place that protect space and Earth environments, and guarantee that the space race to the moon and beyond does not foster a war over space resources? Indeed, if the space debris problem continues to grow unfettered, or if such a thing as a space war were ever to occur, then space would become too trashed for further launches to take place without a great risk of destruction. The private development of space is growing at a flurried pace. Competitions such as the X-Prize for companies to reach orbit and the Google Prize to land a robot on the moon have helped create a new desire for space travel in many citizens throughout the world. The reality is that there are few protections for the environment and the passengers of these flights of fancy. The Federal Aviation Administration (FAA), which regulates space launches, is under a Congressional mandate to foster the industry. It is difficult, if not impossible, to have objective regulation of an industry when it enjoys government incentives to profit. **We have much to determine on planet Earth before we launch willy-nilly into another space race that would inevitably result in environmental disaster** and include a new arms race in the heavens. If we direct our intellectual and technological resources toward space exploration without consideration of the environmental and political consequences, what is left behind in the wake? **The hype surrounding space exploration leaves a dangerous vacuum in the collective consciousness of solving the problems on Earth. If we accept the inevitability of the destruction of Earth and its biosphere, then it is perhaps not too surprising that many people grasp at the last straw and look toward the heavens for solutions and a possible resolution.** Many young scientists are perhaps fueling the prophesy of our planetary destruction by dreaming of lunar and/or Martian bases to save humanity, rather than working on the serious environmental challenges that we face on Earth. Every space-faring entity, be they governmental or corporate, faces the same challenges. Star Trek emboldened us all to dream of space as the final frontier. The reality is that our planet Earth is a perfect spaceship and may be our final front-line. We travel around our star, the sun, once every year, and the sun pulls us around the galaxy once every 250,000,000 years through star systems, star clusters, and gas clouds that may contain exosolar planets that host life or that may be habitable for us to colonize. The sun will be around for billions of years and we have ample time to explore the stars. **It would be wise and prudent for us as a species to focus our intellectual and technological knowledge into preserving our spaceship for the long voyage ahead so that, once we have figured out how to make life on Earth work in an environmentally and politically sustainable way, we can then venture off the planet into the new frontier of our dreams.**

#### I affirm the resolution- the appropriation of outer space is unjust.

#### The Plan solves – it removes the incentive for private exploration.

Dominic Basulto, futurist who writes about innovation, November 18, 2015, The Washington Post, “How property rights in outer space may lead to a scramble to exploit the moon’s resources”, [https://www.washingtonpost.com/news/innovations/wp/2015/11/18/how-property-rights-in-outer-space-may-lead-to-a-scramble-to-exploit-the-moons-resources/] mc

Nearly 50 years ago, of course, we didn’t know anything about the economic potential of space and nobody was seriously talking about humans as an interplanetary species. Certainly, there were not any private companies angling for a piece of the action. Space exploration was solely the preserve of sovereign governments and we referred to astronauts as the “envoys of mankind.” The prevailing sentiment, as expressed in the Outer Space Treaty, was that outer space should belong to all of humanity, not just the first nation to venture into space and plant a flag on the surface of a celestial body. What’s happening now, in essence, is a sea change in how we think about outer space. To convince private commercial space exploration companies to invest millions of dollars, there have to be economic incentives involved. In short, financial backers of these companies have to be able to realize a profit from their investments if innovation is going to happen. That’s the reality. Richards cites the rights of fishing boats in international waters as an economic template for the SPACE Act, “The ships are owned by companies flying flags of nations under which laws they are bound: they have a right to peacefully fish in international waters that they don’t own; but they have a right of ownership of the fish once obtained.” The fishing analogy is a useful one. It suggests that we’re simply extending the same economic principles used on Earth to the moon and beyond, not creating new principles. Seafaring nations are now spacefaring nations. Moon Express even refers to the moon as “the eighth continent,” suggesting that people should think about the moon the same way they think about the other seven continents on the planet. And Planetary Resources, an asteroid mining company, refers to the “off-planet economy.” Throughout the annals of exploration, there have always been commercial incentives. Would the untapped economic potential of America have been possible without similar types of incentives? One example cited by backers of the SPACE Act is the Homestead Act of 1862, which paved the way for Americans to search for gold and timber. Governments they say, have an important role to play here by passing legislation that catalyzes, rather than stifles, growth and innovation. For supporters of the SPACE Act, the year 2017 looms large. That’s exactly 50 years since the passage of the 1967 Outer Space Treaty. And it’s also the deadline for winning the $30 million Google Lunar X-PRIZE. If privately owned companies are going to be landing on the surface of the moon within the next 24 months, they are going to want assurances that their innovative efforts now are going to have an economic payoff later.

#### Property rights are the only reason for private space exploration.

Andrew Brooks, November 9, 2020, Colombia Journal of Transnational Law, “The Artemis Accords: The Necessary Incentive of Space Extraction Rights”, [https://www.jtl.columbia.edu/bulletin-blog/the-artemis-accords-the-necessary-incentive-of-space-extraction-rights] mc

This complaint is particularly interesting as it is the exact opposite of a common criticism that was leveled against the 1979 Moon Treaty. Article 11 of the Moon Treaty reads that “[no] part [of the moon] or natural resources in place, shall become property of any State, international intergovernmental or nongovernmental organization.” For this reason, the Moon Treaty was seen as putting a “moratorium on lunar resource extraction until an international regime [was] established.” This can be contrasted with the tacit approval of resource extraction found in Section 10 of the Accords, which “affirm[s] that the extraction of space resources does not inherently constitute national appropriation.” The fact that Section 10 of the Accords brokers controversy or criticism is reflective of a mentality that has hampered space development for decades. It is no coincidence that seven of the eight countries which ratified the Artemis Accords refused to sign the Moon Treaty. The Accords, unlike the Moon Treaty, pragmatically provide an incentive that has spurred human development and exploration throughout history—ownership rights in the fruits of your labor. The history of innovation is replete with government incentives for private development. Some incentives took the form of cash prizes, similar to the above-mentioned programs operated by the U.S. government. For example, the British famously offered a cash prize to the first person who would develop a method for determining the longitude of ships at sea, and Napoleon offered a prize for food preservation which led to the invention of canning. The other type of incentive, which the Artemis Accords recognize and create in the space field for the first time, is ownership rights. As Alan Wasser—one of the foremost theorists of space property rights—phrases it: the “right to claim newly settled property has always provided the economic incentive for human expansion.” This held true historically during the Age of Discovery, when joint-stock chartered companies raised massive amounts of capital, funding European exploration and settlement. It also holds true in the modern age, with the patent and copyright systems protecting the owner’s ability to profit from their investment. There is no reason then to assume that ownership rights will provide any lesser incentive for future space development. Despite what critics claim, ownership rights are not a proxy for “national dominance.” Such rights do not displace “multilateral international cooperation.” To the contrary, the emergence of private ownership in space will invariably benefit the sort of multinational coalitions best able to fund the enormous amounts of investment needed to reap any benefit. It is true that there will invariably be competition between private enterprises and partnerships; this is unavoidable given the economic stakes. But this competition is unlikely to be violent. The nation-state signatories of the Accords not only agreed to remain compliant with past agreements and their prohibitions on the militarization of space, but further agreed to “make the scientific results obtained from cooperative activities under these Accords available to the public and the international scientific community.” The Artemis Accords recognize the economic benefits that will flow from space exploration and development. However, unlike the ill-fated 1979 Moon Treaty, they also harness human nature and the incentives that history has shown lead to results. Through recognizing the existence of property rights in space, the Accords provide the framework to protect investment in the space field and give investors the hope that perhaps they themselves will be the world’s first trillionaires.

#### There’s no support for space colonization so governments have little incentive or backing to fill in.

**Smith 21** - “POLL SHOWS PUBLIC’S SPACE PRIORITY IS MONITORING EARTH, NOT SENDING PEOPLE TO THE MOON OR MARS” By Marcia Smith | Posted: February 25, 2021 6:23 pm ET | Last Updated: February 25, 2021 6:24 pm ET [https://spacepolicyonline.com/news/poll-shows-publics-space-priority-is-monitoring-earth-not-sending-people-to-the-moon-or-mars/] // ahs emi

A new poll from Morning Consult finds that **the public wants the government to focus its space research agenda on monitoring Earth’s climate, not human exploration of the Moon and Mars.** Overall **it ranked space** research and **exploration 25th** in a list of 26 priorities for the Biden Administration. However, it also wants the United States to keep its competitive edge in space over countries like Russia and China. The top priority was monitoring Earth’s climate system for 35 percent of those surveyed, while it was “important, but lower priority” for 28 percent, “not too important of a priority” for 18 percent, “should not be done” for 7 percent, and “don’t know/no opinion” for 11 percent. Second was monitoring asteroids that might threaten Earth and third was developing technologies that could be used broadly, not only for space. **At the bottom of the list** of 10 possible priorities **was sending civilians to the Moon or Mars. That was** a top priority for just 6 percent, important for 18 percent, **not too important for 39 percent, should not be done for 24 percent**, and 12 percent did not know or had no opinion. Ranking just above that was sending “astronauts” to the Moon or to Mars, which apparently refers to professional astronauts as compared to the general public. NASA is embarked on the Artemis program with commercial and international partners to return people to the Moon and go on to Mars, although according to this survey only 33 percent rate the Moon goal as a top or important priority and 24 percent for Mars. Also of interest, especially as entrepreneur Jared Isaacman is testing the waters of public interest in flying into space by choosing a person by lottery to join him on Inspiration4, of those surveyed **58 percent said they were unlikely to travel to space themselves even if price was no object.** The poll also found that while most support the Biden Administration’s decision to keep the U.S. Space Force, a sixth branch of the military created during the Trump Administration, many said they did not know or had no opinion suggesting they “might not be as up to speed on the government’s space efforts.”

#### Privatization is the only feasible, cost-effective way to explore space – NASA fails and crowds out enterprise.

Boaz 08 (David, VP of the Cato Institute, “Space Privatization – From Cato to the BBC” Sep. 15 2008 <http://www.cato-at-liberty.org/space-privatization-from-cato-to-the-bbc/>) recut mc

Future expeditions to the Moon and beyond will only be politically and financially feasible if they are cut-price ventures. He concludes that fostering good relations with other countries is insufficient justification for the expenditures, and that NASA should move aside and allow the private sector to play a role in manned space flight. The cost of these activities must lessen if they are to continue, and that will only happen with a decrease or removal of government involvement. Rees observes that only NASA deals with science, planetary exploration, and astronauts, while the private sector is allowed to exploit space commercially for things such as telecommunications. However, there is no shortage of interest in space entrepreneurship: wealthy people with a track record of commercial achievement are yearning to get involved. Rees sees space probes plastered with commercial logos in the future, just as Formula One racers are now. Those ideas may sound radical, but not if you’ve been following the work of the Cato Institute. As long ago as 1986, Alan Pell Crawford wrote hopefully “space commercialization … is a reality,” and looked forward to the country making progress toward a free market in space. The elimination of NASA was a recommendation in the Cato Handbook for Congress in 1999. Edward L. Hudgins, former editor of Regulation magazine, wrote a great deal about private options in space. In 1995, he testified before the House Committee on Appropriations that the government should move out of non-defense related space activities, noting the high costs and wastefulness incurred by NASA. In 2001, Hudgins wrote “A Plea for Private Cosmonauts,” in which he urged the United States to follow the Russians (!) in rediscovering the benefits of free markets after NASA refused to honor Dennis Tito’s request for a trip to the ISS. Hudgins testified again before the House in 2001, this time before the Subcommittee on Space and Aeronautics. He noted that since the beginning of the Space Age, NASA has actively discouraged and barred many private space endeavors. This effectively works against the advancement and expansion of technology, while pushing out talent to foreign countries who court American scientists and researches to launch from their less-regulated facilities. In “Move Aside NASA,” Hudgins reported that neither the station nor the shuttle does much important science. This makes the price tag of $100 billion for the ISS, far above its original projected cost, unjustifiable. Michael Gough in 1997 argued that the space “shuttle is a bust scientifically and commercially” and that both successful and unsuccessful NASA programs have crowded out private explorers, eliminating the possibility of lessening those problems. Molly K. Macauley of Resources for the Future argued in the Summer 2003 issue of Regulation that legislators and regulators had failed to take into account “the ills of price regulation, government competition, or command-and-control management” in making laws for space exploration.

#### Destruction of Earth prevents space exploration.

Bartels 18 - Meghan Bartels, Space, September 13, 2018 “How Space Exploration Can Teach Us to Preserve All Life on Earth” [https://www.space.com/41818-earth-biodiversity-conservation-lessons-from-space.html] Accessed 1/5/22 SAO

While space offers a new perspective on Earth and its problems, space scientists cautioned against the common viewpoint that other planets can offer refuge if Earth becomes untenable for human existence. That's the wrong approach, according to some. "We are not going to fix any of the problems that we have on Earth by going to Mars," Cabrol said. "If we are not capable of understanding our problems here on Earth," she said, "we are just going to transfer this mentality onto another planet." (Rand added that such projects would almost certainly perpetuate the same power relationships and inequities that have shaped terrestrial societies for millennia.) [The BFR: SpaceX's Mars-Colonization Architecture in Images] And fleeing is particularly risky given how grim life on another planet is likely to be for the foreseeable future. "Maybe what Mars is going to give us is a consciousness of how beautiful, precious, fragile Earth is." Cabrol said. "We should not use planetary exploration as an escape." That isn't to say there's nothing space can offer us when it comes to solving our problems, Cabrol said. She said that one of the gifts of planetary exploration is that it puts new challenges in our path and forces us to solve them promptly, creatively and often remotely. That's the sort of skill with obvious implications for life on a fast-changing Earth. And if we continue to lose biodiversity here on Earth, space exploration may slip out of reach, Rummel said, as species losses ripple through food webs and cause accelerating change. "The very basis of the economies and support systems on the Earth that allow us to envision going elsewhere with both robots and people, those are the things that are in jeopardy." He points to the host of ecosystem services we rely on without blinking an eye, from insects that pollinate crops to plants that filter air and soil that retains stormwater. The same is true of climate change, which is raising temperatures and strengthening storms around the world. NASA satellites have spent the week monitoring Hurricane Florence and a host of other tropical storms that will leave death and destruction in their wakes — and one of which has also delayed a cargo launch to the International Space Station. Last year's hurricanes Irma and Harvey damaged Kennedy Space Center and shuttered Johnson Space Center. But biodiversity loss and climate change are both massive, incremental, depressing problems — precisely the sort of challenge humans hate to tackle. "Innovation is sexy and fixing things that already exist that can be repaired is not," Rand said. "It's much more fun and glitzy to imagine trying to build something new in a new place." But here, the history of space exploration may be able to offer a more productive mindset, despite the temptation of looking to the next horizon and the next mission. NASA has a long track record of extending missions and reprogramming damaged telescopes or robots already at work. Perhaps those examples, coupled with the nitty-gritty data and big-picture views that the agency offers of our home planet, can teach us to embrace a culture of conservation.

#### Global climate change is an impact of unprecedented magnitude. Positive feedback loops, mass starvation, resource conflicts, biosphere uninhabitability, and grid collapse are all existential.

Peter Kareiva and Valerie Carranza, Director of the Institute of the Environment and Sustainability at UCLA & Pritzker Distinguished Professor in Environment & Sustainability, in Futures, in 2018 ["Existential risk due to ecosystem collapse: Nature strikes back", https://www.sciencedirect.com/science/article/pii/S0016328717301726, 7-30-2019] AR

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (climate change, global freshwater cycle, and ocean acidification) do pose existential risks. This is because of intrinsic positive feedback loops, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition climate, freshwater, and acidification are all directly connected to the provision of food and water, and shortages of food and water can create conflict and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846-1849 and the large migration of Irish to the US can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. Ample clean water is not a luxury – it is essential for human survival. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al, 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes Humans are remarkably ingenious, and have adapted to crises throughout their history. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). However, the many stories of human ingenuity successfully addressing existential risks such as global famine or extreme air pollution represent environmental challenges that are largely linear, have immediate consequences, and operate without positive feedbacks. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, the earth’s climate system is rife with positive feedback loops. In particular, as CO2 increases and the climate warms, that very warming can cause more CO2 release which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox et al., 2000; Hajima et al., 2014; Knutti & Rugenstein, 2015; Rosenfeld et al., 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warning (Melillo et al, 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey et al., 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies et al., 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that forest fires will become more frequent and severe with climate warming and drought (Scholze et al., 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al, 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-californialargest-wildfire ). This catastrophic fire embodies the sorts of positive feedbacks and interacting factors that could catch humanity off-guard and produce a true apocalyptic event. Recordbreaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry et al., 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof et al., 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement et al., 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that runaway climate change, and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary Material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks portends even greater existential risks. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change. 5. It is multiplicative stresses (or “double whammies”) that should be our greatest concern It is easy to see how positive feedback loops exacerbate existential risks. A second, but less obvious danger is the linkage of seemingly unrelated processes or phenomenon that increase risk. A good example is wildfires and tornadoes. Both of these represent natural disasters that can cause great damage. Until recently no one linked these two phenomena, and no one would have imagined that an increase in wildfires might cause an increase in tornados. However, researchers in 2016 documented a linkage between wildfires in Central America and the worst episode of tornadoes in North America’s recorded history (Saide et al., 2016)—more than 120 twisters in one day, which killed 316 people. The mechanism is that the aerosol particles produced by wildfires increase the vertical sheer in atmospheric wind speeds, which in turn makes tornadoes more likely and more severe. While tornadoes and wildfires are both local there are other trends that are national or even global that entail interacting risks factors—or what the renowned ecologist Robert T. Paine called a “double whammy” (Paine, 1993). Paine makes the argument that whereas one perturbation or stress on its own might not be terribly worrisome, if an ecosystem is hit with two stresses or threats at the same time (or in quick succession) the result can be surprisingly catastrophic. For example, aging infrastructure in the United States (dams, bridges, levees, etc.) is often talked about as a disaster waiting to happen (Reid, 2008). Similarly, increased extreme rainfall is widely appreciated as a likely outcome of climate change. Putting the two together, we have a recipe for turning improbable events into something that should be expected. A specific example of what was once a highly unlikely tragedy, but is now perhaps a probable disaster is the failure of a large dam. If large aging dams fail due to the combination of decaying infrastructure and unprecedented rainfall, downstream communities could be destroyed. Existing dams were engineered for flood frequencies and rainfall regimes that have been replaced by much more extreme weather events. This should raise general concerns about flood-safety. Not only are the designs for major dams obsolete due to climate changes, the dams themselves are obsolete. In the United States alone, more than 85% of large dams will be more than 50 years old by 2020 (Hossain et al., 2009). Based on data from the National Performance of Dam Failures, the top ten causes of dam incidents in the United States are depicted in Fig. 2a. The most frequent type of incident was attributed to inflow floods—that is more than 1000 dam failures. The reason this is a global concern is that observations (Fig. 2b) in dry and wet regions all over the world show that extreme precipitation events have been increasing since the 1950s (Donat et al., 2017). The combined effect of intensified rainfall and old dams pose a clear risk to communities worldwide. California, which has used dams and reservoirs to store water on a massive scale, recently suffered through several consecutive years of both low rainfall and high temperatures that produced a 5-year record-breaking drought (Diffenbaugh et al., 2015). The drought ended when the state experienced massive amounts of precipitation in early 2017 leading to its wettest rainy season, on record (Vahedifard et al., 2017). The rainfall unleashed floods, landslides, and nearly collapsed the Oroville Dam, the tallest dam in North America. The tremendous water flows severely damaged the dam’s spillways, prompting the evacuation of about 190,000 people downriver of the dam (Park & Mclaughlin, 2017). This particular crisis is an example of how the intersection of climate change and infrastructure that is either aging or that was designed for different conditions can potentially lead to a catastrophe (Vahedifard et al., 2017). With the likelihood of more frequent extreme events in the future, situations like the one experienced at the Oroville Dam will become more common. The intersection of climate change and human activity is also elevating the risk of severe wildfires in large portions of the world. Models suggest that precipitation was the primary driver behind global fire regimes during the preindustrial era, and then shifted towards an anthropogenicdriven regime during the industrial period (Pechony & Shindell, 2010). Now it appears that temperature will play a strong role in the 21st century in global wildfires (Pechony & Shindell, 2010). The combination of increasing temperatures at the global scale with increased propensity of wildfires due to human activity at the local level, could lead to massive infernos (Bonan, 2008). Wildfire severity and frequency will be dramatically increased wherever the mean temperature in a region increases by 3°C or more; unfortunately, in the Sahel, central Australia, central Asia, southern Africa, the western U.S., and in most of South America, warming is indeed expected to exceed 3°C (Scholze et al., 2006). This is a global threat. Sometimes there is irony in the way stresses combine to produce a catastrophe. Humans have adapted to heat waves by installing air conditioning. The combination of a heat wave, with increased demands for irrigation and air conditioning led to the largest ever power outage in India during 2012. Over 600 million were left without electricity and without air conditioning to mitigate the heat wave (Lundgren & Kjellstrom, 2013). Hospitals lost power and cities shut down. While it is possible to improve on the design of electric grids to reduce such massive outages (Fang, 2014), it is clear that the combination of extreme climate events and how humans respond to those heat waves has led to several massive power outages around the world (Klinger & Landeg, 2014). The irony is that air conditioning is an adaption to heat—and the adoption of air conditioning routinely saves lives (Barreca et al., 2016). But the adaptation that saves human lives can overburden an electric grid and make it much more susceptible to failure. Again it is the interconnections of stresses and the way we respond to environmental shocks that promulgates the greatest existential risk.

### UV

1. 1AR theory is legitimate since the negative could do literally anything without the ability to call out the abuse. Drop the debater because four minutes isn’t enough to read a shell and still have time to cover substance sufficiently. No RVI because the 2nr would get six minutes to collapse to turns on a shell I only spent 30 seconds on. Aff theory first – A) Proportionality – The 1ar has to dedicate a significantly larger portion of it’s time reading theory and the 2n can spend much longer answering it B) Size of impact – neg abuse is always structurally worse since the 1ar only has 4 minutes to compensate whereas the NC has 13 to adapt.

2. No new 2NR theory, paradigm issues, or weighing – A) It allows the 1nc to spend all it’s time reading pure offense and then collapse the debate to one shell and dump 6 minutes of new weighing that is impossible for the 2ar to wade through in 3 minutes B) It’s irreciprocal cause they would get 13 minutes to develop theory arguments without being restrained by the previous speech whereas judges would never vote on 2ar theory C) It’s a violation of the rules of debate since my framing issues were in the 1ac.