# R5 – TOC – 1NC vs Stockdale GS

## 1

#### Interpretation: The affirmative may only garner offense from the hypothetical implementation \_\_\_\_\_\_\_ and may not garner offense external to that.

#### Resolved indicates a policy action.

Parcher 01. [Jeff. 2/26/01. “Re: Jeff P--Is the resolution a question?” [https://web.archive.org/web/20050122044927/http://www.ndtceda.com/archives/200102/0790.html](https://web.archive.org/web/20050122044927/http:/www.ndtceda.com/archives/200102/0790.html)] Justin

(1) Pardon me if I turn to a source besides Bill. American Heritage Dictionary: Resolve: 1. To make a firm decision about. 2. To decide or express by formal vote. 3. To separate something into constiutent parts See Syns at \*analyze\* (emphasis in orginal) 4. Find a solution to. See Syns at \*Solve\* (emphasis in original) 5. To dispel: resolve a doubt. - n 1. Frimness of purpose; resolution. 2. A determination or decision. (2) The very nature of the word "resolution" makes it a question. American Heritage: A course of action determined or decided on. A formal statemnt of a deciion, as by a legislature. (3) The resolution is obviously a question. Any other conclusion is utterly inconcievable. Why? Context. The debate community empowers a topic committee to write a topic for ALTERNATE side debating. The committee is not a random group of people coming together to "reserve" themselves about some issue. There is context - they are empowered by a community to do something. In their deliberations, the topic community attempts to craft a resolution which can be ANSWERED in either direction. They focus on issues like ground and fairness because they know the resolution will serve as the basis for debate which will be resolved by determining the policy desireablility of that resolution. That's not only what they do, but it's what we REQUIRE them to do. We don't just send the topic committtee somewhere to adopt their own group resolution. It's not the end point of a resolution adopted by a body - it's the prelimanary wording of a resolution sent to others to be answered or decided upon. (4) Further context: the word resolved is used to emphasis the fact that it's policy debate. Resolved comes from the adoption of resolutions by legislative bodies. A resolution is either adopted or it is not. It's a question before a legislative body. Should this statement be adopted or not.

#### Violation:

#### Standards:

#### 1 - competitive equity and clash - changing the topic favors the aff because it destroys the only stasis point and makes prep impossible because any ground is self-serving, concessionary, and from distorted literature bases. Their model allows someone to specialize for 4 years giving them an edge over people who switch every 2 months. Filter this through debate’s nature of being a game where both teams want to win, which becomes meaningless without constraints.

#### Comes first -

#### A - Procedural fairness outweighs—1] intrinsicness—debate is a game and equity is necessary to sustain the activity 2] probability—debate can’t alter subjectivity, but it can rectify skews 3] metaconstraint—all your arguments concede fairness since you assume they will be evaluated fairly 4] application—your model only indicts how fairness has been appliednot that it’s intrinsically bad—their model would justify exclusion.

#### B - Switch Side Debate—they can read it as a K against affirmatives—forces debaters to consider issues from multiple perspectives. Non-topical affs allow individuals to establish their own metrics for what they want to debate leading to dogmatism.

#### C - Evaluation – their arguments only seem true because they have an advantage – equity is a meta constraint on your ability to determine who’s better under the aff method since if one debater had 10 minutes to speak and the other had 1 it alters the ability to judge the truth value of the aff which means no cross apps and you should presume their arguments are false since I wasn’t adequately prepared to contest them so they don’t get to weigh the case if we couldn’t engage it to start with since I couldn’t disprove it.

**2 - TVA –**

#### Any DA to the TVA isn’t an absolute reason to reject it – it just is proof that there’s workable clash under my interp where both the aff and neg can engage.

#### Paradigm issues:

#### TFW is drop the debater – it indicts their method of engagement and proves we couldn’t engage fairly with their aff.

#### Competing interps – reasonability is arbitrary, you can’t be reasonably topical, and causes a race to the bottom of questionable argumentation.

#### No impact turns or RVIs -

#### 1 - Perfcon – if T’s bad and you vote for them on that arg, you’re voting on T.

#### 2 - Substance – if T’s bad then we should try debating on substance – impact turns force me to go for T since I need to defend my position.

#### 3 - Chills some debaters from reading theory against abusive postions.

## 2

#### Interpretation: The affirmative debater must articulate a distinct ROB in the form of a delineated text in the 1AC speech.

#### Violation:

#### Standards:

#### 1 - Strat Skew – Absent a text in the 1AC, they can read multiple pieces of offense under different ROBs and then read a new one in the 1AR so they never substantively lose debates under the ROB. They can warrant things like condo logic, consequentialist policy-making offense for their aff, or kritikal impacts that deviate from their plan and then read an incredibly nuanced ROB in the 1ar that makes it so only the conceded or under-covered offense matters. Stable advocacies are key to fairness since otherwise you aren’t bound by anything you say. Infinite abuse – Reading a new ROB in the 1AR makes it so all you have to do is dump on the 1N ROB and marginally extend your warrants in the 2ar and the neg can’t do anything about it since there is no 3NR to answer the 2ar weighing or extrapolations, you already have conceded offense, all you need is the ROB.

#### 2 - Reciprocity –

#### A - restarting the ROB debate in the 1ar puts you at a 7-6 advantage on the framing debate since I have to propose one in the 1N since 2N arguments are new – putting it in the aff makes it 13-13

#### B - you have one more speech to contest my ROB and weigh, I can only possibly answer your ROB in the 2n but you can do comparative weighing in the 2ar

#### C - I can only read a ROB in the 1N so you should read it in your first speech as well – that’s definitionally an equal burden.

## 3

#### Interpretation: The affirmative may only garner offense from direct defense of the resolution not defense of an action that would lead to or be the effect of the resolution. To clarify they may not defende a “response to the resolution”

#### Violation:

#### Standards:

#### 1 - Predictable Limits - The aff interpretation allows any plan to become topical as long as it eventually leads to the the reduction of appropriation. Creates an infinite amount of topical affs that the neg can never predict or prepare for.

#### 2 - Ground - destroys neg ground because they can spike all topic links by achieving them through another action.

#### Paradigm:

#### Fairness – Debate is a competitive activity governed by rules. You can’t evaluate who did better debating if the round is structurally skewed, so fairness is a gateway to substantive debate.

#### DTD – Time spent on theory cant be compensated for, the 1nc was already skewed, and its key to deterring abuse.

#### Prefer Competing interps -

#### 1. reasonability is arbitrary and invites judge intervention.

#### 2. it Causes a race to the bottom where debaters push the limit as to how reasonably abusive, they can be.

#### No RVI’s -

#### 1. Chills some debaters from reading theory against abusive postions.

#### 2. incentivizes theory baiting where you can just bait theory to win.

## 4

#### P/P negate:

#### A - the resolution indicates the affirmative is proactive, and permissibility would deny the existence of an obligation

#### B - Statements are more often false than true because any part can be false. This means you negate if there is no offense because the resolution is probably false.

#### The ROB is to vote for the debater who bests proves the truth or falsity of the resolution.

#### Prefer:

#### 1. Ground - truth testing allows for the more ground than any other ROB since it allows for an infinite amount of arguments on a range of argumentation style giving the most breadth and depth of topic and phil ed.

#### 2. Necessity - All statements assert implicit truth value i.e. if I say “I smell violets” that is the same as saying “It is true that I smell violets.” This creates a double bind—either they assert the truth value of their indicts to truth testing meaning they implicitly accept truth testing as a paradigm or they don’t assert the truth value of their indicts which means that they are false and truth testing is true anyways.

#### 3. Inclusion – other ROBs open the door for personal lives of debaters to factor into decisions and compare who is more oppressed which causes violence in a space where some people go to escape. Specific role of the ballots exclude all offense besides those that follow from their framework which shuts out people without the technical skill or resources to prep for it.

#### 4. Textuality – Five Dictionaries[[1]](#footnote-1) define to affirm as to prove true[[2]](#footnote-2) and negate as to deny the truth of which means the sole judge jurisdiction is to vote on the resolution’s truth or falsity. This outweighs on common usage – it is abundantly clear that our roles are verified.

#### Negate:

#### 1 - The[[3]](#footnote-3) “(with a unit of time) the present; the current.” but appropriation has no specified time frame

#### 2 - appropriation[[4]](#footnote-4) is a sum of money or total of assets devoted to a special purpose.” but outer space cannot own a sum of money

#### 3 - of[[5]](#footnote-5) “expressing an age” but the rez is atemporal

#### 4 - outer[[6]](#footnote-6) is “further from the center or inside..” but the resolution is aspacial and doesn’t specify distance

#### 5 - space[[7]](#footnote-7) is to “the dimensions of height, depth, and width within which all things exist and move” but the rez doesn’t volume

#### 6 - by[[8]](#footnote-8) is “indicating the amount or size of a margin.” but the resolution and entities doesn’t specify

#### 7 - private[[9]](#footnote-9) is “(of a person) having no official or public role or position.” so entities have no authority over appropriation

#### 8 - entity[[10]](#footnote-10) is “the existence of a thing as contrasted with its attributes” but the rez doesn’t spec

#### 9 - is[[11]](#footnote-11) describes being “Stay in the same place or condition.” so action is impossible and negate on presumption

## 5

#### CP Text: The private appropriation of outer space is unjust except for the use of private Chinese space weather satellites for the sole use of collecting data and studying space weather.

#### **China’s private satellite data is uniquely key to advanced space weather forecasting – that prevents catastrophe.**

Aghajanian 12 [Liana Aghajanian, journalist, citing Dr. Rainer Schwenn, one of the developers of KuaFu; Dr. William Liu, a senior scientist at the Canadian Space Agency; the 2008 National Academy of Sciences Report; May 14, 2012. “Cloudy With a Chance of Catastrophe: Predicting the Weather in Space.” http://mentalfloss.com/article/30665/cloudy-chance-catastrophe-predicting-weather-space]

In 1859, while observing sunspots, a young astronomer named Richard Carrington recorded a geomagnetic storm so powerful, the electrical currents it sent to Earth were enough to keep the newly invented telegraph operating without a battery. Centuries later, though humans have sent robots to Mars and even strong-armed a couple engineers into walking on the moon, the science of space weather, the changing environmental conditions in near-Earth space, has largely managed to elude us. In fact even the term “space weather” is new; it wasn’t used regularly until the 1990s. Now, an international project led by China is hoping to advance the study of space weather by light-years in order to minimize the dangerous impact a storm in space might have on us fragile Earthlings. If experts are correct, there's a chance that a serious space weather threat will arrive sooner rather than later – and the risk to humans is greater than you think. Oddly, the trouble is that we’ve become too advanced. Because humans today are so dependent upon modern electrical technology, a space storm the size of the one Carrington recorded in 1859 could cause catastrophic problems if it occurred tomorrow. According to a 2008 National Academy of Sciences Report, from long-term electrical blackouts to damage to communication satellites and GPS systems (not to mention billions in financial losses), the results could be devastating worldwide. Luckily, scientists are hopeful the KuaFu project will prevent (or at least minimize the impact of) this kind of disaster. Our Eyes on the Sun, The Sun in Our Eyes Named for Kua Fu, a sun-chasing giant from a Chinese folktale whose pursuit to tame the brightest star in our solar system ended after he died of thirst, the KuaFu project will create a space weather forecasting system 1.5 million kilometers from the Earth's surface. The goal is similar to the one from the legend: to observe changes in solar-terrestrial storms, investigate flows of energy and solar material, and improve the forecasting of space weather. Not necessarily to tame the sun, but, at least, to understand it. Proposed in 2003 by scientist Chuanyi Tu from the Chinese Academy of Sciences, the project will place three separate satellites at strategic points in our solar system to observe the inner workings of space weather. China's National Space Administration along with the European and Canadian Space Agencies will work together to man them. “Being aware of the impending blindness to space weather and its effects, we consider a mission like KuaFu absolutely mandatory,” said Dr. Rainer Schwenn, one of the developers of KuaFu. “If 'space weather' keeps being considered an important science goal, then KuaFu is a real key project.” The satellites will offer an unprecedented ability to glean information about the often tumultuous relationship between the sun and Earth, by allowing scientists to observe both the star and its effects on the planet simultaneously. To now, this process has been viewable only via computer simulation. “You have to look at the two systems simultaneously [to most accurately forecast space weather]” said Dr. William Liu, a senior scientist at the Canadian Space Agency who took over as project leader when Chuanyi Tu retired two years ago. “It's a real observation; it's what's actually happening.” Space Storm Showdown: What Do We Do? So, if the power-grid frying, billion dollar damage-wreaking storm is inevitable, how much will forecasting it actually help? Lots. According to Liu, predicting space weather activity can give the operators who maneuver satellites in space the information they need to protect them and us from harm. For example: If companies know a storm is approaching, it gives them a chance to tweak their loads before their systems descend into chaos and shut off power for, say, the entire East Coast of the United States. “That's how you prevent catastrophe,” Liu explained. “You reduce the load on the parts that are more sensitive.” While the project was originally scheduled to be completed this year, Liu’s current estimates put its debut at 2016. Despite the delays, he remains optimistic it will come to fruition, pointing out that international collaborations like this one often stir up scientific and financial challenges that delay the launch process. Whether the KuaFu project will be able to predict space weather accurately all of the time is up for debate. Liu, however, is confident that, at the very least, it's a step toward that direction . “With this launch and operation, we'll make our predictions better. Whether it will be 100 percent, that will be too much to ask, but it will definitely improve our knowledge.”

#### Severe space weather is a great filter event that sparks resource wars, economic collapse, grid failure, pandemics, and nuclear miscalc.

Loper 19 [Dr. Robert D. Loper, Ph.D. from the Air Force Institute of Technology, Assistant Professor of Space Physics, Spring 2019. “Carrington-class Events as a Great Filter for Electronic Civilizations in the Drake Equation.” Publications of the Astronomical Society of the Pacific. https://iopscience.iop.org/article/10.1088/1538-3873/ab028e/meta]

Eastwood et al. (2017), the National Academy of Sciences (2008), and the Royal Academy of Engineering (2013) outline the potential economic impacts of severe space weather. In particular, major direct impacts from a Carrington-class CME could be outlined as including the following. 1. Power grid failure due to destruction of large transformers by geomagnetically induced currents. The large transformers in question here generally cost about $1 million per unit and require about 18 months to manufacture, ship, and install. The National Academy of Sciences (2008) report estimates such a power grid failure would cost $1–2 trillion per year6 and last four to ten years. 2. Outages or failures of LEO (low Earth orbit) space assets due to enhancement of the inner Van Allen belt. A severe solar storm can also cause ionospheric uplift which can dramatically increase satellite drag (Tsurutani et al. 2012). Additionally, LEO spacecraft operation could be disrupted by solar energetic protons (SEPs) generated in the shock of the CME passage through the solar wind (Royal Academy of Engineering 2013). 3. Outages or failures of GEO (geosynchronous equatorial orbit) space assets due to enhancement of the outer Van Allen belt or due to SEPs generated in the shock of the CME passage (Royal Academy of Engineering 2013). 4. GPS outages due to GEO spacecraft outages or failures, or GPS degradation due to ionospheric uplift and enhancement, potentially lasting several days or longer. 5. Communications outages due to high-frequency and ultrahigh-frequency radio blackouts, as well as cellular communication network and internet collapse due to extended power outages beyond the limits of generators and stored fuel. In particular, although optical ﬁber cables are the foundation of much of the global communication network, electrical power is still needed to power optical repeaters and transmitters (Royal Academy of Engineering 2013). 6. Increased radiation doses to astronauts and airline passengers (Royal Academy of Engineering 2013). This is more of a risk for long-haul airline ﬂights or manned spaceﬂight. Major indirect effects could include, but are by no means limited to, the following: 1. water and waste water shortages due to reduced or eliminated pumping from power grid failure; 2. fuel shortages due to reduced or eliminated pumping from power grid failure, which could result in transportation stoppages; 3. food shortages due to transportation stoppages, which could contribute to increased death rates and incite rioting and/or looting; 4. reduced hospital care due to water shortages and power outages, which could contribute to increased death rates and rates of infection; and 5. a years-long power grid and internet degradation or outage might irrevocably damage the global economy, in turn greatly prolonging the time to restore the power grid beyond the estimate of four to ten years. If one recalls major disasters caused by terrestrial weather events like hurricanes Katrina (New Orleans, 2005) and Maria (Puerto Rico, 2017), one can imagine the sorts of major effects on people and life in those areas. The most striking difference is that, whereas humanitarian aid came to bear on these disasters, a Carrington-class event would be a global catastrophe with little or no aid forthcoming. Much greater loss of life could result, and our civilization could be driven back to a much more fractured and pre-electronic one. For the purposes of another planet’s Drake equation, our civilization would be eliminated from the calculation. Conversely, another planet whose electronic civilization were struck by a Carrington-class CME would be eliminated from our calculation. Riley (2012) estimates the probability of another Carringtonclass event occuring within the following decade at about 12%. This estimate preceded the solar storm of 2012, but a good rule of thumb would be to estimate this to be the probability of having a Carrington event during any given solar cycle. Love (2012) and Kataoka (2013) have calculated probabilities in rough agreement, but there are a wide range of probabilities in the literature, ranging from once per 60 years (Tsubouchi & Omura 2007) to once per 500 years (Yermolaev et al. 2018). This work will retain the result of Riley (2012), which is also used in National Academy of Sciences (2008) and Royal Academy of Engineering (2013). This roughly agrees with the “once in a century” designation usually given to the Carrington event. Royal Academy of Engineering (2013) indicates that this designator is not well understood given the relative lack of data, but also that there are several tens of Carrington-class CMEs every century that either miss Earth or have lesser impact due to a northward orientation of the interplanetary magnetic ﬁeld. As shown in Figure 1, such a CME has a very wide angular extent (in the 2012 July event, the CME extended in about a 135° arc from the Sun), which could strike Earth in three out of eight occurrences. There is also some indication that a solar storm could trigger other Great Filter events. Knipp et al. (2016) outlines a solar storm in 1967 May that nearly triggered a nuclear war, as American radar operators initially mistook a solar storm for Soviet jamming. It might also be possible that a Carrington-class event could unleash or exascerbate an infectious disease due to reduced hospital care at a critical time, resulting in a pandemic.

#### Solves the aff – isn’t space col/their cards don’t indict our use of outer space.

## Case

#### 1] Only evaluate the net amount violence solved by the aff Filter the debate through scope of solvency—there’s no impact to root cause if they don’t solve it. Aff cannot overcome the sum total of colonialist violence – structural barriers that are outside the scope of resolution will always exist

#### 2] Extinction outweighs it precludes the possibility for future generations and denies any possible value to life – any other metric is paternalistic resulting in involuntary death turns their offense. Framing issue alt solvency is dependent upon generating social life, which is impossible in a state of biological death.

#### 3] The aff gives the state MORE power – 1AC specifically bans private companies from space but not public companies which leaves only the public sector for space exploration, all 1AC evidence proves how much people want to go space, however after the 1AC its done only through the state which is net worse according to the aff

#### 4] Voting aff in this round cannot solve colonialist violence – but it can rectify procedural fairness skews or an endorsement of a policy, evaluate the round by virtue of how much the ballot can solve, even if fairness isn’t the HIGHEST impact, it IS the highest impact you as a judge can impac

#### Evaluate consequences

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

Second, reducing conversation on race matters to an ideological contest allows opponents to elide inquiry into whether the results of a particular preference policy are desirable. Policy positions masquerading as principled ideological stances create the impression that a racial policy is not simply a choice among available alternatives, but the embodiment of some higher moral principle. Thus, the "principle" becomes an end in itself, without reference to outcomes. Consider the prevailing view of colorblindness in constitutional discourse. Colorblindness has come to be understood as the embodiment of what is morally just, independent of its actual effect upon the lives of racial minorities. This explains Justice Thomas's belief in the "moral and constitutional equivalence" between Jim Crow laws and race preferences, and his tragic assertion that "Government cannot make us equal [but] can only recognize, respect, and protect us as equal before the law." [281](http://web.lexis-nexis.com/universe/document?_m=cd9713b340d60abd42c2b34c36d8ef95&_docnum=9&wchp=dGLbVzz-zSkVA&_md5=9645fa92f5740655bdc1c9ae7c82b328) For Thomas, there is no meaningful difference between laws designed to entrench racial subordination and those designed to alleviate conditions of oppression. Critics may point out that colorblindness in practice has the effect of entrenching existing racial disparities in health, wealth, and society. But in framing the debate in purely ideological terms, opponents are able to avoid the contentious issue of outcomes and make viability determinations based exclusively on whether racially progressive measures exude fidelity to the ideological principle of colorblindness. Meaningful policy debate is replaced by ideological exchange, which further exacerbates hostilities and deepens the cycle of resentment.

#### Extinction first – not fearmondering

Pummer 15 [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

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)

#### Racial capitalism fails as a theory.

Go 21 – Professor of Sociology at the University of Chicago (Julian, “Three Tensions in the Theory of Racial Capitalism”, Sociological Theory, Vol. 39, No. 1, pp. 38-47, 2021)

What Is the “Race” in Racial Capitalism? We can now turn to the three tensions in the racial capitalism literature, beginning with the issue of race. This is critical. If the term racial capitalism is to have implications for social theory, it must offer rigorously defined concepts constituting a transposable conceptual apparatus. Surely one of those concepts would have to do with “race.” But what exactly is “race”? The problem is that “race” is not typically defined in the existing literature, so it is unclear whether other categories marking difference, such as ethnicity, are more appropriate than race. Should we be thinking about “ethnic capitalism” rather than racial capitalism? Robinson’s (2000) work is a prime example. Nearly all scholars claim that one of Robinson’s key contributions is to show that capitalism was forged from precapitalist racial divisions in Europe. Capitalism is “racial,” according to Robinson, “because racialism had already permeated Western feudal society,” and capitalism was built upon that racialism (Kelley 2017; Táíwò and Bright 1996). The problem is that Robinson himself was not entirely clear that precapitalist social differences were actually “racial.” On one hand, he did use the term race in his analysis. “Racism,” Robinson (2000:2; see also pp. 26–27, 66–67) wrote, served to structure “the ‘internal’ relations of European peoples” prior to capitalism, and capitalism seized on racism as it developed. On other hand, when discussing some of the presumably “racial” groups in feudal Europe, Robinson (2000:10–11) referred to linguistic rather than phenotypical differences, thus equating racial groups with linguistic groups. In fact, when discussing how migratory and immigrant labor formed the basis for the armies of the Absolutist states and for the production of value in early agrarian capitalism, he oscillated between calling them “races” and “ethnic” groups. For instance, Robinson (2000:23) used the phrase “ethnic divisions of sixteenth century immigrant labor,” and he referred to “national” differences when presumably speaking about premodern “racial” differences. Given these ambiguities, Robinson’s argument could be read differently from how it is conventionally taken. It is not that capitalism was built on prior racial differences; rather, capitalism served to racialize the preexisting ethnic division of labor, thereby turning religious, cultural, or linguistic differences into “racial” ones to legitimate its new exploitative structure. In this view, racialization—the process of turning groups into biological entities called “races”—was a part of modern capitalism, not its precursor (cf. Omi and Winant 1986). In some passages, Robinson (2000) said this exactly: “the tendency of European civilization through capitalism was thus not to homogenize but to differentiate—to exaggerate regional, subcultural, and dialectical differences into ‘racial’ ones” (p. 26). Of course, whether “race” preexisted capitalism does not alter the larger argument of the racial capitalism approach, which is that racial differentiation and capitalism are mutually supportive. Still, the tension in Robinson’s work manifests the deeper issue of whether “racial” capitalism refers to race or other identities. This issue permeates Walzer’s (2020) recent criticism of the racial capitalism concept. Walzer points to examples such as Russia and China, where capitalism does not rely on racial differences but rather on ethnic and religious differentiation. “It may be that Muslims are among the most exploited workers in Russia,” he wrote, “but they are mostly Caucasian (some of them the original Caucasians), so we would have to talk about religious capitalism—where Orthodox Christians, not white people, are the privileged group.” On this basis, Walzer rejected the racial capitalism concept as limited at best and analytically debilitating at worse. Skeptics of Walzer have offered a rebuke: his argument misses the global dimensions of capitalism. At issue is not whether racial stratification articulates with capitalism within any single country but whether it permeates the world-capitalist system. Proponents of this argument could readily assemble evidence to show that, on a global scale, the vast majority of the world’s proletariat, subproletariat, and dispossessed—whether cultivating grapes or coffee on the farms of the Americas, cleaning up office floors in London, or making clothes in the sweatshops of New Delhi—are, to borrow DuBois’s (1935) phrase, “yellow, brown and black.” Against Walzer, this would retain the main claim of the racial capitalism approach that race and capitalism are intertwined. Yet this scaling upward of capitalism to a global level brings its own complications. It carries the danger of what Bourdieu and Wacquant (1999) called “the cunning of imperialist [racialist] reason”: an analytic operation by which U.S.-centered scholars impose presumably U.S.-centric classifications (in this case, “race”) onto the rest of the world, thereby imposing racial classifications into contexts where they might not be operative. We would be obliged, for instance, to impose racial classifications onto Latin American contexts such as Brazil, where the salience of racial classifications is debatable (Loveman 1999; Wimmer 2015). In short, if we are to insist on the global character of racial capitalism, we must assume that analysts’ racial classifications are global as well. They may very well be, but racial capitalism’s founding texts, and more recent discussions, have not sufficiently problematized this tension.2 Can this tension be resolved? One way to do so is to raise the possibility that the racial capitalism concept works best for groups that have been undoubtedly racialized, such as members of the African diaspora in North America.3 Racial capitalism would thus refer mainly to the black ex-slave population, which has suffered some of the clearest and most virulent forms of racism. This might explain why the literature on racial capitalism has focused on African Americans and transatlantic slavery rather than other groups elsewhere in the world. Yet this seeming resolution would significantly reduce the scope of the racial capitalism concept. Racial capitalism would no longer depict a global system. Perhaps the best resolution is one that arrives through more reflexive research. We can explore how “race” is connected to capitalism in diverse sites and across historical periods, but we must be more conscious about whether we are referring to analysts’ definition of race or a category of practice. Put simply, we can arrive at a resolution only through careful research that more clearly defines “race.” The Inadequacy of Existing Theory A second tension in the racial capitalism literature has to do with the relationship between this literature and existing social theories of capitalism, in particular, Marxian theories of capitalism. Animating the racial capitalism approach is the claim that Marxian theories of capitalism are inadequate because they obfuscate the racial foundations of capitalism. For Robinson (2000), “Western Marxism . . . has proven insufficiently radical to expose and root out the racialist order that contaminates its analytic and philosophic applications” (p. 317). Historians’ use of the racial capitalism approach is premised on the idea that Marxism does not adequately acknowledge slavery’s role in capitalism or the ongoing importance of colonialism and “primitive accumulation,” which Marx presumably relegated to the margins of his theory (Smallwood 2018). This is exactly why scholars in this tradition insist on the term racial capitalism: because Marxian theory fails to theorize race, we must add the qualifier race to the signifier capitalism. But what if Marxian theory does in fact take into account race, slavery, imperialism, and colonialism, and proponents of the racial capitalism approach merely misread Marx? If so, the warrant, if not the entire premise, for Robinson’s and others’ work on racial capitalism would crater by an unfortunate misreading of Marxian theory. A number of scholars, in fact, already push against the notion that Marxist thought does not account for race, slavery, or colonialism. Drawing largely on Marx’s journalistic writings, they show that Marx not only discussed race, slavery, and colonialism but saw them as central for capitalism. According to this argument, Marx saw race as so crucial for capitalism that his theory saw the true proletariat as black, brown, and yellow—directly contrary to Robinson’s claim that Marxist theory only saw the white European proletariat as the true subject of history (Anderson 2010; Foster, Holleman, and Clark 2020; Ralph and Singhal 2019). If true, the racial capitalism literature is based on a “misguided reading of Marx” (Ralph and Singhal 2019:864). How might this apparent aporia in Marxian theory be resolved, if at all? It is imperative here to register a distinction between Marx’s theory of capital and his theory of capitalism. 4 The former is sketched in Marx’s mature social theory in Capital and related writings such as The Grundrisse (Postone 1996). These writings offer a formalized and abstract representation of the inner workings of capital, its accumulation, its contradictions, and its necessary demise through a series of central categories that capture the key elements of the capitalist system. At this level of abstraction, the main categories of the theory (e.g., “value,” “surplus value,” “concrete labor,” “abstract labor,” “capital,” “socially necessary labor time”) are devoid of any historical specificity or social content and as such can be applied to distinct historical phases or social formations (e.g., capitalism in the eighteenth-century transatlantic world or Russia in 1998, or the twenty-first-century global system). Categories of race, gender, or ethnicity are therefore not central, because they are too concrete. Alternatively, a theory of capitalism refers to capitalist development and dynamics in their empirical specificity. It is meant to explain and describe specific capitalist formations and developments as they really exist in the world, not their abstract conceptual form. This theory can be extracted from Marx’s journalistic writings and other essays, and it is here where issues such as slavery and ethnicity arise: the essays refer to real events and pressing issues in actually existing capitalism, such as the Civil War or the Irish question (Anderson 2010). But these observations or statements on concrete processes and relations such as slavery in actually existing capitalism—that is, Marx’s theory of capitalism—do not disturb or reconfigure his theory of capital, which remains focused on the relations of wage labor induced to a highly abstract level from his analysis of textile production. If and when he did discuss things such as slavery, such as in “The Working Day” section in Capital, he treated slavery as a passing phase or outside capital’s inner logic, a sort of heuristic to better apprehend and illuminate the latter (Marx [1867] 1906:328–30; on slavery as a heuristic, see Smallwood 2018). This distinction between Marx’s theory of capitalism and his theory of capital helps us better approach the debate generated by the racial capitalism literature. When Robinson or other proponents of the racial capitalism idea critique Marx’s theory for eliding or deliberately occluding race, slavery, and colonialism, they are critiquing his theory of capital, not his theory of capitalism. Here proponents of the racial capitalism approach are on solid ground. Marx’s theory of capitalism does take into account race, slavery, and colonialism, but his theory of capital renders these things marginal at best.5 Hence the warrant for the racial capitalism approach: because Marx’s theory of capital does not center race, the racial capitalism concept and the research and theorizing that go under its banner can fill the void. The concept may provide the basis for an alternative theory not only of racial capitalism but also of racialized capital. Necessity, Contingency, and Difference The final tension within racial capitalism is whether the interconnectedness of racial difference and capitalism is a logical or contingent necessity.6 If, as the racial capitalism literature suggests, slavery and its associated logics of racism have been crucial for the development of capitalism, and if global capitalism today remains intertwined with racial stratification, to what extent are these relations intrinsic to capitalism or accidental? Put differently, is capitalism necessarily racist (Fraser 2019; Lemann 2020)?7 For some, the relationship is only contingent. Walzer (2020) argued that in some countries, capitalism proceeds along just fine without racial difference, and if there is racial difference on a global scale, it is historically contingent. Although the vast majority of workers are nonwhite, Walzer suggested that this is not due to any intrinsic logic of capitalism but rather the accident of demographics (because most of the world is nonwhite, the majority of the world’s workers will be nonwhite). For this reason, Walzer suggested we disavow the racial capitalism concept. Alternatively, others claim that racism is indeed intrinsic to capitalism.8 There are two versions of this claim. One is that racism is necessary to divide the working class and legitimate the rule of the bourgeoisie. Racism is an ideological necessity of capitalism, justifying its unequal relations (Camp, Heatherton, and Karuka 2019; McCarthy 2016; Taylor 2016). “Capitalism requires inequality,” suggested Gilmore (2015), “and racism enshrines it.” A very different version, coming most predominantly from Fraser (2019), is that capitalism necessarily entails relations of exploitation and expropriation that feed off each other. Exploitation is the extraction of value from “free subjects” through wage labor. But expropriation, which includes slavery and colonialism, extracts value from racialized “dependent subjects” and is what enables exploitation to happen in the first place. Expropriation is “a necessary background condition for the exploitation of ‘workers’” (Fraser 2019) and therefore for capitalism itself. Capitalism is thus logically dependent upon racism.9 So what is the answer? Again, it helps differentiate between a theory of capital and a theory of capitalism. A theory of capitalism might demonstrate that race has been historically necessary for capitalist accumulation by reference to empirical reality: historically, capitalism and race have always been intertwined. But the claim that race is a logical necessity to capitalism would have to derive from a theory of capital, not from empirics alone. One would have to deduce, from the categories of Marx’s theory, the necessity of racism or racial differentiation in society. On this score, the arguments for the logical necessity of capitalism’s entanglements with race fall short. Consider the argument that racism is necessary for capitalism because capitalism requires racist ideology to divide the working class. This is a functionalist argument that is not functionalist enough, for it effaces the logical possibility of functional substitution. We may find that racism has historically always functioned to divide the working class, but in theory other “isms” could serve the same function. There is nothing inherent to the logic of capital that requires race to be the ideology of division (Lebowitz 2006:39).10 Why not ethnicity? Why not sexuality? Consider Fraser’s argument that expropriation is intrinsic to capitalism and that racial differentiation must be too. It is plausible and indeed persuasive to claim that expropriation is necessary for capitalism, but it is less persuasive to claim that racial difference is logically necessary for expropriation. Gender could easily serve as the main axis of dependent classification (and, to feminist-Marxist thought, it has served that function), as could ethnicity, religion, sexuality, or citizenship. Fraser would have to show that expropriation, and hence capitalism, requires a racial classification as opposed to other social categories. This is a task left unfulfilled.11 A different and possibly more productive route would be to reframe the issue as one of social difference rather than race. Is racism necessary for capitalism? There are good reasons, as just mentioned, to think not. But is social difference of various types (from race to gender to ethnicity) necessary for capitalism?12 This is more demonstrable, both empirically (by reference to actually existing capitalism) and theoretically (by reference to the logic of capital accumulation). For example, Fraser’s argument about expropriation could be reformulated in the following manner: expropriation is logically necessary for exploitation, which is in turn necessary for capital accumulation, and expropriation requires differentiation among workers. This differentiation could be along racial lines, or it could be along other lines such as gender, but differentiation there must be. Note that this argument logically insinuates a racial component but remains abstract enough to account for other possible identities across different capitalist formations. It can account for racialized slave labor in the eighteenth-century transatlantic world (where “race” was a key axis of differentiation), twentieth-century Russia (where ethnicity or religion might be the important axis), or gender across all these formations. This is just one possibility. There are others. Chakrabarty (1993), for instance, seized on Marx’s categories of “abstract” and “real” labor to write difference into Marx’s theoretical architecture. “Abstract labor” generated by capitalism refers to a homogeneity among different and otherwise incommensurable labors. It is the register of the juridical free subject. But “real” labor marks have heterogeneity that registers the incommensurability of different labors. It therefore refers to a difference that stands “only as a Derridean trace of something that cannot be enclosed” (Chakrabarty 1993:1096). Exactly how persuasive is Chakrabarty’s rereading remains to be seen. The point is that this effort, and others like it, speak to theoretical possibilities that the racial capitalism literature opens up but has yet to pursue thoroughly. More could be done.13

#### **Capitalism is inevitable, adaptive, and alternatives are comparatively worse.**

[Meltzer](http://public.tepper.cmu.edu/facultydirectory/FacultyDirectoryProfile.aspx?id=98) 09 Dr. Allan H. Meltzer, economist and professor of Political Economy at Carnegie Mellon University’s Tepper School of Business in Pittsburgh (The eighth lecture in the 2008-2009 Bradley Lecture series, 3/9/2009, “There is no better alternative than capitalism”, [http://hiram7.wordpress.com/2009/03/12/there-is-no-better-alternative-than-capitalism/)//](http://hiram7.wordpress.com/2009/03/12/there-is-no-better-alternative-than-capitalism/)//jk)

**There is no better alternative than capitalism** as a social system **for providing growth and personal freedom. The alternatives offer less freedom and lower growth. The “better alternatives” that people imagine are almost always someone’s idea of utopia**. Libraries are full of books on utopia. **Those that have been tried have not survived** or flourished. **The most common reason for failure is that one person or group’s utopian ideal is unsatisfactory for others** who live subject to its rules. Either the rules change or they are enforced by authorities. Capitalism, particularly democratic capitalism, includes the means for orderly change. **Critics of capitalism look for viable alternatives to support. They do not recognize that**, unlike Socialism, **capitalism is adaptive, not rigid. Private ownership of the means of production flourishes in many different cultures**. Recently **critics of capitalism discovered the success of Chinese capitalism as an alternative to American capitalism. Its main feature is mercantilist policies supported by rigid controls on capital**. China’s progress takes advantage of an American or western model–the open trading system–and the willingness of the United States to run a current account balance. China is surely more authoritarian than Japan or western countries, a political difference that previously occurred in Meiji Japan, Korea, and Taiwan. Growth in these countries produced a middle class followed by demands for political freedom. China is in the early stages of development following the successful path pioneered by Japan, Korea, Taiwan, Hong Kong, and others who chose export-led growth under trade rules. Sustained economic growth led to social and political freedom in Japan, Korea, and Taiwan. Perhaps China will follow. **Capitalism continues to spread. It is the only system humans have found in which personal freedom, progress, and opportunities coexist. Most of the faults and flaws on which critics dwell are human faults, as Kant recognized. Capitalism is the only system that adapts to all manner of cultural and institutional differences. It continues to spread and adapt and will for the foreseeable future.**

#### Capitalist growth is sustainable.

Rune **Westergård 18**. Entrepreneur, Engineer and Author, founder of the technical consulting company CITEC. 2018. “Real and Imagined Threats.” One Planet Is Enough, Springer International Publishing, pp. 71–80. CrossRef, doi:10.1007/978-3-319-60913-3\_7.

Threatening reports about our ability to create disasters and even exterminate ourselves are not a new idea. A standard example is the British national economist Thomas Malthus in the early 19th century, who predicted that population growth would come to a halt because of starvation. Malthus calculated that the available food in the world couldn’t feed more than one billion people. He extrapolated the development from a still picture of his own time and couldn’t fathom that food production would increase tremendously thanks to new knowledge and technology. Our present food production is sufficient for seven times as many. Malthus didn’t pay attention to the fact that we live in a continuously changing civilisation, and the same kind of miscalculations are still made today. There are people who have even achieved the status of media superstars by presenting various dystopias and catastrophe scenarios. As early as 1968, Professor Paul Erlichs at Stanford University published the bestseller The Population Bomb, where he predicted that an imminent population explosion would result in hundreds of millions of deaths by starvation in the 1970s and 80s. Basically, he made the same mistake as Malthus, i.e. he treated knowledge and technology as if they were static phenomena. The most widely read environment report in the world, State of the World, was a loud whistle-blower when it was first published in the early 1980s. The Swedish version, Tillståndet i världen, was published yearly from 1984 and some years into the 2000s by the Worldwatch Institute Norden; I still have some of the early issues left. This report contains many valuable observations and suggestions, but also several basic analytical mistakes. In other words, it acts as an eye-opener, but it suffers from being tainted by political ideology. Its main weakness is that it doesn’t take the intrinsic driving forces of progress into account. State of the World was translated into most major languages and is, as already mentioned, the world’s most widely read environmental report. It has affected us all, directly or indirectly, through school and media. Even if the Swedish version I refer to was written some years ago, it is still worthy of discussion, firstly because it maintains an appearance of scientific validity, and secondly because it has served as a trendsetter for the general ideology which has been adopted by many later books and reports on the subject at hand. It still lives on as an engraved pattern in our conception of the world. In the report we can, for instance, read the following: A world where human desires and needs are fulfilled without the destruction of natural systems demands an entirely new economic order, founded on the insight that a high consumption level, population growth, and poverty are the powers behind the devastation of the environment. The rich have to reduce their consumption of resources so that the poor can increase their standard of living. The global economy simply works against the attempts to reduce poverty and protect the environment. We stubbornly insist to regard economic growth as synonymous with development, even though it makes the poor even poorer. Even if we up to this point have mainly described the environment revolution in economic terms, it is, in its most fundamental meaning, a social revolution: to change our values. Massive threat scenarios are still presented, for instance in the British scientist Tim Jackson’s book Prosperity Without Growth from 2009, which is one of the most widely read and frequently quoted works in this area. Tim Jackson, who is an economist and professor in sustainable development, explains how we humans are indulging in a ruthless pursuit of new-fangled gadgets in a consumption society running at full speed towards its doom. He also claims that material things in themselves cannot help us to flourish; on the contrary, they may even restrain our welfare. In other words, we cannot build our hopes that the economy, technology or science can help us to escape from the trap of Anthropocene, which has brought us to the brink of an ecological disaster. There are hundreds on books on this theme, and they all agree that the general state of the world is pure misery; everything is getting worse, the resources are being depleted, and that man will soon have destroyed the entire planet. The apparent reason for this, of course, is due to the consumption culture and the present financial system—which exposes man as a greedy, ruthless and ultimately weak creature. This attitude may serve a purpose as an eye-opener. But it is not very credible, and it may even be counterproductive. Of course, we can see a lot of problems ahead of us; but to solve them, we need the correct diagnostics instead of dubious doomsday prophesies. Focus: The Problem Since the focus of attention is so profoundly fixated on the problems in the climate and environmental debate, the progress already made—and the opportunities at hand—are often overshadowed. The example below will help to illustrate this point: In the year 2014, the Nobel Prize in physics was awarded to three scientists who had invented blue light emitting diodes—a technology that has made high-bright and energy-efficient LED lighting possible. As lighting accounts for 20% of the world’s total electrical consumption, this invention has the potential to radically reduce energy consumption and greenhouse gas emissions. In an interview made by the major Swedish daily newspaper Dagens Nyheter, one of the prize winners, Hiroshi Amano, says the following about energy-efficient, inexpensive and high-bright LED lights: “They are now being used all over the world. Even children in the developing countries can use this lighting to read books and study in the evenings. This makes me very very happy”. Shortly after this announcement, the news headlines declared that LED lighting was a threat to the environment. This statement was based on a report showing that LED lighting could be hazardous to flies and moths, which in turn might disturb the eco system. This is a typical example of how progress pessimists and, not least the media, think and act. In this case, they focused on a potential problem associated with LED lighting, and ignored the tremendous possibilities that the new technology offered to dramatically reduce greenhouse gases and thus spare the eco system (not to mention all the other advantages). Books and reports of the kind mentioned above tell us repeatedly about disasters, threats, problems, collapses and famines. On the other hand, they are notoriously silent about the great improvements actually made—the reduction of extreme poverty (not only as a percentage but also in absolute numbers), longer lifespans, dramatic global progress in education and healthcare, etc. The lack of positive media coverage on the environment means that many people believe that too little is being done, which is quite understandable considering the one-sided nature of the information they are presented with. Alarmist reporting almost always reminds me of pirates: they are unreliable and half their vision is blocked by their eye patches. It is vital that the media not only one-sidedly focus on the misery without presenting the progress made and suggesting constructive courses of action. The quality of our decisions in all respects depends on our knowledge, insight and attitude. Real and Imagined Threats Many people are convinced that the climate and environmental problems are growing. It is certainly true that our planet has its limitations, but many of the predictions from alarmist literature have been proven false. In the 1980s, the forest dieback was a frequently discussed subject. To quote the well-known German news magazine Der Spiegel, an “ecological Hiroshima” was imminent. Most experts at the time claimed that a wide-spread forest death seemed unavoidable. Additionally, the general mood of impending doom was augmented by the threat of a nuclear disaster during the cold war. I remember the pessimistic discussions among friends and how frequently the gloomy reports appeared in Swedish and Finnish television. The future of humankind appeared to be depressingly bleak. But the forest dieback never happened. On the contrary, the forest area has been constantly expanding in Europe, even during the entire period when the forest was believed to be dying. Today, only two thirds of the yearly accretion in Europe are cut down, according to the Natural Resource Institute in Finland. There are different opinions as to why the large-scale forest dieback didn’t occur. One theory is that the researchers’ evidence and conclusions had been incomplete and too hasty; the forest was actually never in danger. Others suggest that the emission limitations implemented prevented the disaster. My point is that the environmental catastrophe did not happen. Some other environmental problems, exaggerated or not, that have concerned us during the last decades have also disappeared from the immediate agenda: overpopulation, DDT, the ozone hole, heavy metals, lead poisoning, soot particles, the waste mountain, and the acidification of our lakes. Unfortunately, some environmental problems, like soot particles and waste, still remain in some areas, especially in poorer countries, where there are other, even worse problems that have yet to be resolved. The conclusion is, however, that we and our society in most cases have handled threatening situations quite well. When alarming symptoms are noted, scientists and other experts are summoned, and we act according to their diagnoses. It is no big deal that the diagnoses are sometimes wrong, as long as the side effects are not too severe. The main thing is that we do our best to avoid disasters, and on the whole, humankind has succeeded rather well this far. As individuals, we react very differently to various kinds of threats. The closer and more tangible the threat is, the more violent are the reactions—while distant and invisible symptoms, like the depletion of the ozone layer, concern us less. In the latter cases, we have to trust the scientists’ and later the politicians’ reactions. Does this mean that disasters are avoided thanks to war headlines, threats, and anxiety? I don’t think that this is the most important explanation; rather, it is factual and science-based information that produces effective results. But if exaggerated threat scenarios and reports of misery are needed to inspire the necessary political opinion, acquire research funding and create behavioural changes, we will have to live with that. The most important thing to remember in this context is that the actions shouldn’t cause more harm than the original problem itself. The risk with exaggerated threat and misery reporting is that it may inspire an over-reaction based on misleading diagnoses, or the opposite—a paralysing feeling of helplessness. It is necessary to take threats against the climate and the environment seriously, but not to a degree where our ability to reason and act is blocked by fear or anxiety. Many environmental debaters claim that the fall of the Inca and Roman empires were caused by the same causes that are now threatening our present civilisation—a short-sighted over-exploitation and rape of nature. Easter Island is another popular example. However, in my opinion it is both worthless and irresponsible to judge the world situation of today by copying the outcome of earlier cultural endeavours in history. The inhabitants of the Inca empire and Easter Island didn’t have anything even remotely comparable with the organisations, technology, medicine or general knowledge of today. It would be like comparing a case of appendicitis in the past to a case today. In pre-modern times, it was a fatal condition. In this day and age, it is cured by a simple routine operation. Today, humankind is conscious of the climate changes and other ecological challenges. And we also have the knowledge and resources needed to act. Facts, Propaganda and Hidden Messages During all the years I have followed the development of technology and society, I have repeatedly observed how a mishmash of serious research, political propaganda, and the hidden agendas of individuals have been distributed more or less randomly by the media. There are of course many different kinds of alarmism— everything from well-founded research reports to exaggerated prophesies of doom. It is far from simple to separate the wheat from the chaff. The actions taken against ozone depletion, lead emissions and the toxic chemical, dioxin, are all examples of how research has shown the way to successful results. Today, greenhouse gas emissions top the list of issues deserving our gravest attention, as it is a global phenomenon—just as the depletion of the ozone layer once was. There are also a considerable number of local environmental problems, such as drought, air pollution, forest depletion and overfishing. All of these are real threats that have to be acted upon, even though they are not global. However, I am always disturbed when a single global environmental issue is bundled with an assortment of several local issues, rather like a simplified trademark advertisement for the negative consequences of civilisation. This makes the information abstract and inaccurate, ignoring the fact that different locales require different solutions. Fear and alarmism are natural reactions that once protected us when we were living at the mercy of nature—they are evolutionary relics from our life in the savanna. Today, the same properties can be significant drawbacks. The transition from a primitive, animal-like state to the society we have today must, on the whole, be counted as a great success. But many people regard the same world as over-exploited, depleted, unjust, war-ridden and balancing on the brink of destruction. How can people living in the same epoch have so entirely different views of the world? In the sustainability debate, there is one faction dealing with the natural resources and ecosystems, and another focusing on the redistribution of wealth. There is even a third faction discussing a minimalistic lifestyle; for example, downshifting, with less work and less material welfare. When all these ingredients are mixed without discretion, the result is an anxiety soup that many have choked on. In a situation like that, we cannot expect any constructive initiatives to materialise. Instead, it would be far better to explore, research and discuss each dimension separately. What Is the Real State of the Planet? It is easy to generalise and say that we over-exploit the planet’s resources and pollute the world with our waste. But how many care to examine these statements in detail and ask exactly which resources are over-exploited? • Are fish becoming extinct? It is true that overfishing occurs in many places, which is, of course, unsustainable. However, this is not an unavoidable threat to the world’s total food resources. Fortunately, there are several examples of fish stocks that have either recovered or started to replenish once the fishing effort has been eased. • Is the air being poisoned? Many are convinced that the air we breathe is becoming dirtier all the time. But that isn’t true, at least not in the Western world. From the year 1990, emissions of sulphur dioxide have been reduced by 80%, nitrogen oxides by 44%, volatile organic substances by 55%, and carbon monoxide by 62%. Despite these dramatic improvements, 64% of Europeans believe that pollution is increasing. • Are the forests dying? It is a general belief that the forests in the developed countries are dwindling. But that isn’t true; on the contrary, the wooded areas are expanding. However, the forests are decreasing in the poor countries, where forestry and farming are still major sources of income, as they once were in the industrialised countries. • Are we drowning in waste? There are many who believe that we are surrounded by constantly growing mountains of waste. In the developed countries, the truth is that increasing amounts of waste are being recycled and the landfills are decreasing. • Will there be enough phosphorus? Phosphorus is an important nutrient in farming, extracted from phosphate ore. Many scientists fear that the finite natural resource of phosphate ore will become depleted in the future, which may jeopardise the world’s food supply. But there are already working solutions for this problem, such as by reclaiming phosphorus through digestion residues and sewage sludge. There are also technological solutions for the chemical extraction of phosphorus from polluted water—the remediation of lakes and rainwater by removing phosphorus is already a common procedure. Here we achieve a win-win situation—phosphorus is collected while preventing the eutrophication of lakes. • Will there be enough energy to go around? A common statement is that the earth’s population is too large, and that we consume too much energy with respect to the climate. This is one of those issues where we have to think in terms of symptoms, diagnoses, and medication. The symptoms are there for all to see: climate change. On the other hand, the diagnosis that we consume too much energy is wrong. The correct diagnosis is that we are not using the right technology; i.e. energy efficient power production without harmful emissions. Consequently, the correct statement would be that we consume energy that is produced by technologies that are harmful to the climate. The difference in wording is important. As the first diagnosis is “too high energy consumption”, the remedy will be to use a different medication than a diagnosis based on “the wrong technology”. Alarmist reporting can inspire bad decisions if the statements aren’t systematically reviewed and evaluated. It can also be misguiding to express environmental threats in general terms. Actions must be based on precise specific symptoms with corresponding diagnoses. If the doctor discovers that the patient is lame and suffers from a high fever, it doesn’t help to predict imminent death. Maybe the lameness and the fever have different causes altogether! A successful cure would probably include two different diagnoses with separate medications. Several recent surveys of the general conception of the world have been made— one is Project Ignorance by Gapminder and Novus in Sweden. One of the questions asked was whether CO2 emissions per capita and year had increased or decreased in the world during the last 40 years. The surveyed group was large and representative in order to give a fairly accurate picture of the common opinion. No less than 90% believed that CO2 emissions had increased. The truth is that they haven’t increased at all. It is important that decision makers on all levels learn how to see the wood from the trees. Decisions based on false preconditions can halt technological development, and thus also the development of the economy, welfare, and a healthier environment. The flow of innovations in the climate and environmental areas is accelerating rapidly.

#### Destruction of cap cant overcome all systems of neolib - crises cause elites to double down on austerity measures and structural adjustment that hasten privatization.

Peck and Theodore 19 Jamie Peck is Canada Research Chair in Urban & Regional Political Economy and Professor of Geography at the University of British Columbia, Canada. He is the Managing Editor of Environment and Planning A and the convenor of the Summer Institute in Economic Geography. Nik Theodore is a Professor, Urban Planning and Policy, Associate Dean for Faculty Affairs and Research, CUPPA. “Still Neoliberalism?” The South Atlantic Quarterly, 118, April 2019

--Always assumed to be on its last legs but comes back - 2008 seen as comprehensive repudiation but still kicking

--“No alternative” is the reigning ideology – solution was austerity measures, taax cuts, structural adjsmtnet across the global South, challenges to public service provision/social security/healthcare, and financial elites got bailed out/deregulated

--Changes come and go – Dodd Frank and liquidity shock requirements got repealed – Syrizas in Greece still got austerity medicine and then wrecked in 2019 election by conservatives

That neoliberalism remains a circulating if contestable term, after decades of fitful and fickle usage, might be considered an achievement of sorts. Repeatedly disowned, denigrated, and dismissed, it nevertheless refuses to go away— at least circumstantial evidence, perhaps, that there is indeed “some there there.” This is not the place to revisit the extended genealogy of this troubled signifier and its contested historical geography (see Peck 2010; Cahill et al. 2018), except to observe that its turbulent fortunes, perhaps especially in the period since the Wall Street crash of 2008, have been revealing, while at the same time adding new layers of mystification and puzzlement to what has been a never-less-than-checkered history. What was to be a particularly heavyhanded reboot of this history began in the thick of that last crisis, a little over a decade ago. Perhaps unsurprisingly, the Wall Street crash was at the time widely interpreted as both a comprehensive repudiation and a system failure of neoliberalism by key figures on the left, from Eric Hobsbawm to Naomi Klein, who read the moment as terminal for the rolling project of financial deregulation and for the small-state consensus more generally, a view that was echoed by center-left economists such as Joseph Stiglitz and, although not in so many words, by the likes of Paul Krugman. Rather more surprisingly, there were also some mainstream politicians on the right and left flanks of the center ground, from France’s Nicolas Sarkozy to Australia’s Kevin Rudd, who in this uniquely disorientating context were moved to utter the hitherto unspeakable term, albeit only to declare its graceless exit (see Erlanger 2008; Rudd 2009). A common refrain across much of the commentary at the time, when real economies around the world and the credibility of those charged with their stewardship were both in freefall, was that the much-maligned state would be (had to be) making a comeback—in its own way echoing the arch-neoliberal conceits of governmental withdrawal and free-market governance, as if the state had ever really gone away. Projects of neoliberalization, it has been fairly clear all along to those willing to see, have never been synonymous with a simple diminution, or withdrawal, of the state, but instead have been variously concerned with its capture and reuse, albeit in the context of a generalized assault on social-welfarist or leftarm functions, coupled with an expansion of right-arm roles and capacities in areas like policing and surveillance, incarceration and social control, and the military. Nevertheless, this kind of state project was widely believed to have met its end a decade ago in the Wall Street meltdown.

What followed certainly did not align with the script of a terminal, once-and-for-all collapse of neoliberalism represented (again, somewhat misleadingly) as a bracketable “era” of free-market governance. As if to affirm Thatcher’s premature dismissal that there was “no alternative” to market rule, what followed in the wake of the financial crisis was, far from a retreat of neoliberalism, more like an audacious exercise in doubling down. Longterm austerity measures were (re)imposed in nations rich and poor, including those countries once regarded as the tutelary “heartlands” of the project, and its proving grounds, the United States and the United Kingdom. A new generation of structural adjustment programs targeted not only populations across the global South but also Greece, Detroit, and elsewhere. There were sustained, if scattergun, assaults on many of the old targets—public services, public budgets, and public servants; social movements and labor unions; social security, socialized healthcare, and public-education systems; and undeserving classes, the poor, and racialized others. And all the while, financial and corporate elites got away with slaps on the wrist, if that, only to be compensated in due course with yet more deregulation and further rounds of tax cuts. This unapologetic mutation of late neoliberalism, back as it were from its own grave, may have been shorn of anything approaching credible claims to moral leadership and intellectual authority, but in this reconstituted form it would present a yet more brutal face in its dogged defenses of political power and institutional dominance, soon to be coupled with brazen reassertions of the manifestly dubious case for corporate liberty, financial freedom, and social-state retrenchment.

#### Cap solves war – no root cause.

Gartzke 05 (Erik, associate professor of political science at Columbia University and author of a study on economic freedom and peace contained in the 2005, Economic Freedom of the World Report “Future Depends on Capitalizing on Capitalist Peace,” 10/18, Windsor Star, http://www.cato.org/pub\_display.php?pub\_id=5133)

With terrorism achieving "global reach" and conflict raging in Africa and the Middle East, you may have missed a startling fact - we are living in remarkably peaceable times. For **six decades**, developed nations have not fought each other. France and the United States may chafe, but the resulting conflict pitted french fries against "freedom fries," rather than French soldiers against U.S. "freedom fighters." Tony Blair and Jacques Chirac had a nasty spat over the EU, but the English aren't going to storm Calais any time soon. The present peace is unusual. Historically, powerful nations are the most war prone. The conventional wisdom is that democracy fosters peace but this claim fails scrutiny. It is based on statistical studies that show democracies typically don't fight other democracies. Yet, the same studies show that democratic nations go to war about as much as other nations overall. And more recent research makes clear that only the affluent democracies are less likely to fight each other. Poor democracies behave much like non-democracies when it comes to war and lesser forms of conflict. A more powerful explanation is emerging from newer, and older, **empirical research** - the "capitalist peace." As predicted by Montesquieu, Adam Smith, Norman Angell and others, nations with high levels of economic freedom not only fight each other less, they go to war less often, period. Economic freedom is a measure of the depth of free market institutions or, put another way, of capitalism. The "democratic peace" is a mirage created by the overlap between economic and political freedom. Democracy and economic freedom typically co-exist. Thus, if economic freedom causes peace, then statistically democracy will also appear to cause peace. When democracy and economic freedom are both included in a statistical model, the results reveal that economic freedom is considerably more potent in encouraging peace than democracy**, 50 times more potent**, in fact, according to my own research. Economic freedom is highly **statistically significant** (at the one-per-cent level). Democracy does not have a measurable impact, while nations with very low levels of economic freedom are **14 times more prone** to conflict than those with very high levels. But, why would free markets cause peace? Capitalism is not only an immense generator of prosperity; it is also a revolutionary source of economic, social and political change. Wealth no longer arises primarily through land or control of natural resources. New Kind of Wealth Prosperity in modern societies is created by market competition and the efficient production that arises from it. This new kind of wealth is hard for nations to "steal" through conquest. In days of old, when the English did occasionally storm Calais, nobles dreamed of wealth and power in conquered lands, while visions of booty danced in the heads of peasant soldiers. Victory in war meant new property. In a free market economy, war destroys immense wealth for victor and loser alike. Even if capital stock is restored, efficient production requires property rights and free decisions by market participants that are difficult or impossible to co-ordinate to the victor's advantage. The Iraqi war, despite Iraq's immense oil wealth, will not be a money-maker for the United States. Economic freedom is not a guarantee of peace. Other factors, like ideology or the perceived need for self-defence, can still result in violence. But, where economic freedom has taken hold, it has made war less likely. Research on the capitalist peace has profound implications in today's world. Emerging democracies, which have not stabilized the institutions of economic freedom, appear to be at least as warlike - perhaps more so - than emerging dictatorships. Yet, the United States and other western nations are putting immense resources into democratization even in nations that lack functioning free markets. This is in part based on the faulty premise of a "democratic peace." It may also in part be due to public perception. Everyone approves of democracy, but "capitalism" is often a dirty word. However, in recent decades, an increasing number of people have rediscovered the economic virtues of the "invisible hand" of free markets. We now have an additional benefit of economic freedom - **international peace**. The actual presence of peace in much of the world sets this era apart from others. The empirical basis for optimistic claims - about either democracy or capitalism - **can be tested and refined**. The way forward is to capitalize on the capitalist peace, to deepen its roots and extend it to more countries through expanding markets, development, and a common sense of international purpose. The risk today is that faulty analysis and anti-market activists may distract the developed nations from this historic opportunity.

#### Colonization of outer space is essential to humanity – 5 warrants

Orwig 15 [(Jessica, a senior editor at Insider. She has a Master of Science in science and technology journalism from Texas A&M University and a Bachelor of Science in astronomy and physics from The Ohio State University. Before NY she spent time as an intern at: American Physical Society in MD International Center for Theoretical Physics in Italy Fermi National Accelerator Laboratory in IL American Geophysical Union in DC), “5 undeniable reasons humans need to colonize Mars — even though it's going to cost billions,” Slate, 4/21/2015, https://www.businessinsider.com/5-undeniable-reasons-why-humans-should-go-to-mars-2015-4] MN

Establishing a permanent colony of humans on Mars is not an option. It's a necessity. At least, that's what some of the most innovative, intelligent minds of our age — Buzz Aldrin, Stephen Hawking, Elon Musk, Bill Nye, and Neil deGrasse Tyson — are saying. Of course, it's extremely difficult to foresee how manned missions to Mars that would cost hundreds of billions of dollars each, could benefit mankind. It's easier to imagine how that kind of money could immediately help in the fight against cancer or world hunger. That's because humans tend to be short-sighted. We're focused on what's happening tomorrow instead of 100 years from now. "If the human race is to continue for another million years, we will have to boldly go where no one has gone before," Hawking said in 2008 at a lecture series for NASA's 50th anniversary. That brings us to the first reason humans must colonize Mars: 1. Ensuring the survival of our species The only home humans have ever known is Earth. But history shows that surviving as a species on this tiny blue dot in the vacuum of space is tough and by no means guaranteed. The dinosaurs are a classic example: They roamed the planet for 165 million years, but the only trace of them today are their fossilized remains. A colossal asteroid wiped them out. Putting humans on more than one planet would better ensure our existence thousands if not millions of years from now. "Humans need to be a multiplanet species," Musk recently told astronomer and Slate science blogger Phil Plait. Musk founded the space transport company SpaceX to help make this happen. Mars is an ideal target because it has a day about the same length as Earth's and water ice on its surface. Moreover, it's the best available option: Venus and Mercury are too hot, and the Moon has no atmosphere to protect residents from destructive meteor impacts. 2. Discovering life on Mars Nye, the CEO of The Planetary Society, said during an episode of StarTalk Radio in March that humanity should focus on sending humans instead of robots to Mars because humans could make discoveries 10,000 times as fast as the best spacecraft explorers we have today. Though he was hesitant to say humans should live on Mars, he agreed there were many more discoveries to be made there. One monumental discovery scientists could make is determining whether life currently exists on Mars. If we're going to do that, we'll most likely have to dig much deeper than NASA's rovers can. The theory there is that life was spawned not from the swamps on adolescent Earth, but from watery chasms on Mars. The Mars life theory suggests that rocks rich with microorganisms could have been ejected off the planet's surface from a powerful impact, eventually making their way through space to Earth. It's not a stretch to imagine, because Martian rocks can be found on Earth. None of those, however, have shown signs of life. "You cannot rule out the fact that a Mars rock with life in it landing on the Earth kicked off terrestrial life, and you can only really test that by finding life on Mars," Christopher Impey, a British astronomer and author of over a dozen books in astronomy and popular science, told Business Insider. 3. Improving the quality of life on Earth "Only by pushing mankind to its limits, to the bottoms of the ocean and into space, will we make discoveries in science and technology that can be adapted to improve life on Earth." British doctor Alexander Kumar wrote that in a 2012 article for BBC News where he explored the pros and cons of sending humans to Mars. At the time, Kumar was living in the most Mars-like place on Earth, Antarctica, to test how he adapted to the extreme conditions both physiologically and psychologically. To better understand his poignant remark, let's look at an example: During its first three years in space, NASA's prized Hubble Space Telescope snapped blurry pictures because of a flaw in its engineering. The problem was fixed in 1993, but to try to make use of the blurry images during those initial years, astronomers developed a computer algorithm to better extract information from the images. It turns out the algorithm was eventually shared with a medical doctor who applied it to the X-ray images he was taking to detect breast cancer. The algorithm did a better job at detecting early stages of breast cancer than the conventional method, which at the time was the naked eye. "You can't script that. That happens all the time — this cross pollination of fields, innovation in one, stimulating revolutionary changes in another," Tyson, the StarTalk radio host, explained during an interview with Fareed Zakaria in 2012. It's impossible to predict how cutting-edge technologies used to develop manned missions to Mars and habitats on Mars will benefit other fields like medicine or agriculture. But we'll figure that out only by "pushing humankind to its limits" and boldy going where we've never been before. 4. Growing as a species Another reason we should go to Mars, according to Tyson, is to inspire the next generation of space explorers. When asked in 2013 whether we should go to Mars, he answered: "Yes, if it galvanizes an entire generation of students in the educational pipeline to want to become scientists, engineers, technologists, and mathematicians," he said. "The next generation of astronauts to land on Mars are in middle school now." Humanity's aspirations to explore space are what drive us toward more advanced technological innovations that will undoubtedly benefit mankind in one way or another. "Space is like a proxy for a lot of what else goes on in society, including your urge to innovate," Tyson said during his interview with Zakaria. He added: "There's nothing that drives ambitions the way NASA does." 5. Demonstrating political and economic leadership At a February 24 hearing, Aldrin told the US Senate's Subcommittee on Space, Science and Competitiveness that getting to Mars was a necessity not only for science, but also for policy. "In my opinion, there is no more convincing way to demonstrate American leadership for the remainder of this century than to commit to a permanent presence on Mars," he said. If Americans do not go to Mars, someone else will. And that spells political and economic benefit for whoever succeeds. "If you lose your space edge," Tyson said during his interview with Zakaria, "my deep concern is that you lose everything else about society that enables you to compete economically."

#### Space col key to innovation

West 20 Darrell M. West, 8-18-2020, "Five reasons to explore Mars," Brookings, <https://www.brookings.edu/blog/techtank/2020/08/18/five-reasons-to-explore-mars/> TDI

The recent launch of the Mars rover Perseverance is the latest U.S. space mission seeking to understand our solar system. Its [expected arrival at the Red Planet in mid-February](https://www.nytimes.com/2020/07/30/science/nasa-mars-launch.html) 2021 has a number of objectives linked to science and innovation. The rover is equipped with sophisticated instruments designed to search for the remains of ancient microbial life, take pictures and videos of rocks, drill for soil and rock samples, and use a small helicopter to fly around the [Jezero Crater landing spot](https://mars.nasa.gov/resources/22474/jezero-crater-mars-2020s-landing-site/). Mars is a valuable place for exploration because it can be reached in 6 ½ months, is a major opportunity for scientific exploration, and has been mapped and studied for several decades. The mission represents the first step in a long-term effort to bring Martian samples back to Earth, where they can be analyzed for residues of microbial life. Beyond the study of life itself, there are a number of different benefits of Mars exploration. UNDERSTAND THE ORIGINS AND UBIQUITY OF LIFE The site where Perseverance is expected to land is the place where experts believe 3.5 billion years ago held a lake filled with water and flowing rivers. It is an ideal place to search for the residues of microbial life, test new technologies, and lay the groundwork for human exploration down the road. The mission plans to investigate whether microbial life existed on Mars billions of years ago and therefore that life is not unique to Planet Earth. As noted by Chris McKay, a research scientist at NASA’s Ames Research Science Center, that would be an extraordinary discovery. “Right here in our solar system, [if life started twice](https://www.space.com/9329-earth-unique-life-common-universe.html), that tells us some amazing things about our universe,” he pointed out. “It means the universe is full of life. Life becomes a natural feature of the universe, not just a quirk of this odd little planet around this star.” The question of the origins of life and its ubiquity around the universe is central to science, religion, and philosophy. For much of our existence, humans have assumed that even primitive life was unique to Planet Earth and not present in the rest of the solar system, let alone the universe. We have constructed elaborate religious and philosophical narratives around this assumption and built our identity along the notion that life is unique to Earth. If, as many scientists expect, future space missions cast doubt on that assumption or outright disprove it by finding remnants of microbial life on other planets, it will be both invigorating and illusion-shattering. It will force humans to confront their own myths and consider alternative narratives about the universe and the place of Earth in the overall scheme of things. As noted in my Brookings book, [Megachange](https://www.brookings.edu/book/megachange-economic-disruption-political-upheaval-and-social-strife-in-the-21st-century/), given the centrality of these issues for fundamental questions about human existence and the meaning of life, it would represent a far-reaching shift in existing human paradigms. As argued by scientist McKay, discovering evidence of ancient microbial life on Mars would lead experts to conclude that life likely is ubiquitous around the universe and not limited to Planet Earth. Humans would have to construct new theories about ourselves and our place in the universe. DEVELOP NEW TECHNOLOGIES The U.S. space program has been an extraordinary [catalyst for technology innovation](https://www.jpl.nasa.gov/infographics/infographic.view.php?id=11358). Everything from Global Positioning Systems and medical diagnostic tools to wireless technology and camera phones owe at least part of their creation to the space program. Space exploration required the National Aeronautics and Space Administration to learn how to communicate across wide distances, develop precise navigational tools, store, transmit, and process large amounts of data, deal with health issues through digital imaging and telemedicine, and develop collaborative tools that link scientists around the world. The space program has pioneered the miniaturization of scientific equipment and helped engineers figure out how to land and maneuver a rover from millions of miles away. Going to Mars requires similar inventiveness. Scientists have had to figure out how to search for life in ancient rocks, drill for rock samples, take high resolution videos, develop flying machines in a place with gravity that is 40 percent lower than on Earth, send detailed information back to Earth in a timely manner, and take off from another planet. In the future, we should expect large payoffs in commercial developments from Mars exploration and advances that bring new conveniences and inventions to people. ENCOURAGE SPACE TOURISM In the not too distant future, wealthy tourists likely will take trips around the Earth, visit space stations, orbit the Moon, and perhaps even take trips around Mars. For a substantial fee, they can experience weightlessness, take in the views of the entire planet, see the stars from outside the Earth’s atmosphere, and witness the wonders of other celestial bodies. The Mars program will help with space tourism by improving engineering expertise with space docking, launches, and reentry and providing additional experience about the impact of space travel on the human body. Figuring out how weightlessness and low gravity situations alter human performance and how space radiation affects people represent just a couple areas where there are likely to be positive by-products for future travel. The advent of space tourism will [broaden human horizons](https://unitedearth.us/religion-and-spirituality/does-seeing-earth-from-space-alter-your-perspective/) in the same way international travel has exposed people to other lands and perspectives. It will show them that the Earth has a delicate ecosystem that deserves protecting and why it is important for people of differing countries to work together to solve global problems. Astronauts who have had this experience say it has altered their viewpoints and had a profound impact on their way of thinking. FACILITATE SPACE MINING Many objects around the solar system are made of similar minerals and chemical compounds that exist on Earth. That means that some asteroids, moons, and planets could be rich in minerals and rare elements. Figuring out how to [harvest those materials](https://www.sciencefocus.com/space/space-mining-the-new-goldrush/) in a safe and responsible manner and bring them back to Earth represents a possible benefit of space exploration. Elements that are rare on Earth may exist elsewhere, and that could open new avenues for manufacturing, product design, and resource distribution. This mission could help resource utilization through advances gained with its Mars Oxygen Experiment (MOXIE) equipment that converts Martian carbon dioxide into oxygen. If MOXIE works as intended, it would help humans live and work on the Red Planet. ADVANCE SCIENCE One of the most crucial features of humanity is our curiosity about the life, the universe, and how things operate. Exploring space provides a means to satisfy our thirst for knowledge and improve our understanding of ourselves and our place in the universe. Space travel already has exploded centuries-old myths and promises to continue to confront our long-held assumptions about who we are and where we come from. The next decade promises to be an exciting period as scientists mine new data from space telescopes, space travel, and robotic exploration. Ten or twenty years from now, we may have [answers to basic questions](https://www.brookings.edu/book/turning-point/) that have eluded humans for centuries, such as how ubiquitous life is outside of Earth, whether it is possible for humans to survive on other planets, and how planets evolve over time.

#### Space colonization encourages healthcare innovations- solves diseases

Donoviel 19 (Dorit Donoviel, 7-19-2019, "Space exploration is reinventing healthcare," [20+ years leadership experience as executive director of R&D overseeing diverse areas of biomedical research from basic to applied science, drug discovery, and technology development. Executing a multi-million dollar national research portfolio of grants addressing the plethora of physiological and behavioral challenges of humans in space. Executive Director, Translational Research Institute for Space Health at Baylor College of Medicine] The Hill, <https://thehill.com/opinion/technology/453853-space-exploration-is-reinventing-healthcare>) TDI

Though many do not realize it, humans have been living and working in space continuously for the past two decades. The conditions of spaceflight have accelerated our ability to study progressive degenerative diseases. This novel paradigm of understanding human physiology under the stresses of living in space holds great promise for new sources of medical breakthroughs for Earth. Although astronauts are carefully selected to be exceptionally healthy and exhibit peak physical and mental performance, after only four to six months in space, they can develop numerous medical [conditions](https://humanresearchroadmap.nasa.gov/Risks/). Without appropriate exercise, they lose bone and muscle mass. They become prone to developing kidney stones. Their hearts become deconditioned. Their blood vessels stiffen. A subset of astronauts develop a swelling of the optic nerve and possibly an increase in pressure on the brain. Even dormant viruses become activated, alongside changes to the immune system. There is a sense of urgency to solve these problems if we are to send humans to Mars and return them safely in the next decade or two. This is why NASA is investing in cutting-edge research for human health and performance including high-risk high-reward approaches funded through the [Translational Research institute for Space Health](https://www.bcm.edu/centers/space-medicine/translational-research-institute) (TRISH). Supporting potentially ground-breaking innovations requires a leap of faith in the right direction. Keeping astronauts healthy during deep space exploration missions — where there are no hospitals and no medical specialists — requires a different paradigm for healthcare. Astronauts are typically engineers and scientists, and only occasionally physicians. On the way to Mars, when communications with Earth will be limited, they could be forced to act as both patients and healthcare providers. If a medical condition is allowed to progress when they are millions of miles away from Earth, the situation could become catastrophic. Therefore, astronauts will need to detect even the most subtle changes in their own health status early enough to prevent disease. This requires a healthcare paradigm of predicting, preventing and mitigating ailments by intervening early. This means enabling monitoring, diagnostic and therapeutic medical capabilities that are simple to use, safe, robust and miniaturized. Additionally, what will work in a small spacecraft in the hands of an engineer is also likely to work in a community clinic with limited resources. Or even in our homes. This different approach to healthcare can help save lives and reduce costs — at a global level. Space demands the best in healthcare innovations, focusing on prevention and early intervention using smart, creative solutions. On a mission to Mars, blood tests will be done in a matter of minutes, by the patient, on a single [drop of blood](https://www.1dropdx.com/). A trained and adaptive computer [algorithm](https://www.visualdx.com/) will track health status based on a variety of physiological parameters and alert astronauts when important deviations from normal become evident. [Automated eye exams](https://www.healio.com/ophthalmology/retina-vitreous/news/online/%7Bb1a85e81-9e54-4976-9717-3218fd7fa175%7D/web-vision-technologies-awarded-grants-to-develop-devices-for-nasa) will be performed by the astronauts on themselves and images will be analyzed by a computer for changes. Customized [medications](http://news.mit.edu/2016/portable-pharmacy-on-demand-0331) will be tailor-made for the patient on the spot. If a minor medical procedure is required, the caregiver will learn and practice beforehand using augmented reality tools and software [simulations](https://www.level-ex.com/) adjusted for zero-gravity. Kidney stones will be found early and treated quickly and painlessly using [ultrasound](http://www.sonomotion.com/) to “push” them out of the kidney so they can be cleared naturally with urination. Sleep and mood will be improved using [sound stimulation](https://www.usa.philips.com/a-w/about/news/archive/standard/news/press/2019/20190617-philips-smartsleep-deep-sleep-headband-selected-by-nasa-funded-institute-for-studies-to-improve-sleep-and-behavioral-health.html) and health will be improved by individualized diets which will be enriched with high-nutrient [plants](https://news.ucr.edu/articles/2019/04/25/astronauts-might-soon-grow-space-tomatoes) grown efficiently within a small footprint. Most importantly, all these advances have clear and important applications on Earth. Space exploration has already yielded hundreds of inventions that filled our [arsenal](https://spinoff.nasa.gov/) for fighting diseases. To land women and men on Mars and return them healthy, we must reinvent healthcare. The positive consequences of this work will impact all of humanity. The spirit of Apollo is alive and well in space health research today. And for science, medicine and technology pioneers, our most important work is still ahead.

#### Colonies in space are sustainable and rely on planetary resources

Haynes 19, 5/17, Korey "O’Neill colonies: A decades-long dream for settling space," Astronomy, https://astronomy.com/news/2019/05/oneill-colonies-a-decades-long-dream-for-settling-space Top of Form

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Last week, Amazon founder Jeff Bezos revealed his spaceship company’s new lunar lander, dubbed Blue Moon, and he spelled out a bold and broad vision for humanity’s future in space. Faced with the limits of resources here on Earth, most fundamentally energy, he pointed to life in space as a solution. “If we move out into the solar system, for all practical purposes, we have unlimited resources,” Bezos said. “We could have a trillion people out in the solar system.” And while colonies on other planets would be plagued by low gravity, long distances to Earth (leading to communication delays), and further limits down the road, those weaknesses are avoided if the colonies remain truly in space. To that end, Bezos instead suggested people consider taking up residence in O’Neill colonies, a futuristic concept for space settlements first dreamed up decades ago. “These are very large structures, miles on end, and they hold a million people or more each.” Gerard O’Neill was a physicist from Princeton University who teamed up with NASA in the 1970s on a series of workshops that explored efficient ways for humans to live off-world. Beyond influencing Bezos, his ideas have also deeply affected how many space experts and enthusiasts think about realistic ways of living in space. “What will space colonies be like?” O’Neill once asked the Space Science Institute he founded. “First of all, there’s no point in going out into space if the future that we see there is a sterile future of living in tin cans. We have to be able to recreate, in space, habitats which are as beautiful, as Earth-like, as the loveliest parts of planet Earth — and we can do that.” Of course, neither O’Neill nor anyone since has actually made such a habitat, but in many ways, the concepts he helped developed half a century ago remain some of the most practical options for large-scale and long-term space habitation. While NASA has mostly focused on exploring the moon and Mars in recent years, O’Neill colonies offer an option untethered to any planetary body. Instead, people would live in enormous circular structures in space that would be capable of hosting many thousands of people — or even millions according to Bezos — on a permanent basis. You may have seen these kinds of colonies in science fiction, from Star Trek, to the movie Interstellar. But in real life, researchers have thought up a a few variations: either a sphere, a cylinder, or a ring-shaped torus. All of these are designed to rotate and create a centrifugal force that mimics gravity for the inhabitants. While the sizes and specifications of the colonies vary, there are a few staples. In general, O’Neill colonies were designed to be permanent, self-sustaining structures. That means they would use solar power for electrical energy and for growing crops.

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)
2. *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true* [↑](#footnote-ref-2)
3. <https://www.google.com/search?q=the+definitino&oq=the+definitino&aqs=chrome..69i57j0i67i433j0i67l2j46i433i512j69i60l3.1308j1j7&sourceid=chrome&ie=UTF-8> [Definition #3] [↑](#footnote-ref-3)
4. <https://www.google.com/search?q=appropriation&sxsrf=AOaemvKQemU4kDt9dtiwQnUVUU7LW9GCoQ%3A1639410269344&ei=XWq3YbTHFI-tqtsPs_eviAo&ved=0ahUKEwj06fqVj-H0AhWPlmoFHbP7C6EQ4dUDCA4&uact=5&oq=appropriation&gs_lcp=Cgdnd3Mtd2l6EAMyCQgjECcQRhD5ATIECCMQJzIECCMQJzINCAAQgAQQhwIQsQMQFDIFCAAQkQIyBQgAEJECMgUIABCRAjIFCAAQgAQyBQgAEIAEMgUIABCABDoHCAAQRxCwAzoRCC4QgAQQsQMQgwEQxwEQ0QM6BQguEIAEOg4ILhCABBCxAxDHARCjAjoLCAAQgAQQsQMQgwE6CAguELEDEIMBOggIABCABBCxAzoICAAQsQMQkQJKBAhBGABKBAhGGABQ3wNY4gxgiQ5oA3ABeACAAbsBiAHTDZIBBDAuMTKYAQCgAQHIAQjAAQE&sclient=gws-wiz> [Definition #2] [↑](#footnote-ref-4)
5. <https://www.google.com/search?q=of+definition&rlz=1C1CHBF_enUS877US877&oq=of+definition&aqs=chrome.0.69i59j69i61l3.1473j0j7&sourceid=chrome&ie=UTF-8> //Xu [↑](#footnote-ref-5)
6. <https://www.google.com/search?q=outer+definition&sxsrf=AOaemvIhqFMqUlofS44KTL7ifSUoUpqMpg%3A1639410214502&ei=Jmq3YdOBHpeAqtsP386owAY&ved=0ahUKEwjTrOf7juH0AhUXgGoFHV8nCmgQ4dUDCA4&uact=5&oq=outer+definition&gs_lcp=Cgdnd3Mtd2l6EAMyCggAEIAEEEYQ-QEyBggAEBYQHjIGCAAQFhAeMgYIABAWEB4yBggAEBYQHjIGCAAQFhAeMgYIABAWEB4yBggAEBYQHjIGCAAQFhAeMgYIABAWEB46BwgjELADECc6BwgAEEcQsAM6BwgAELADEEM6CgguEMgDELADEEM6EAguEMcBENEDEMgDELADEEM6BAgjECc6BAgAEEM6BwguELEDEEM6DQgAEIAEEIcCELEDEBQ6CAgAEIAEELEDOggILhCABBCxAzoPCAAQgAQQhwIQFBBGEPkBOgUIABCABDoFCC4QgAQ6CAgAEBYQChAeSgQIQRgASgQIRhgBUKUEWKULYNYMaAFwAngAgAG7AogB1gySAQc0LjMuMi4xmAEAoAEByAEUwAEB&sclient=gws-wiz> [↑](#footnote-ref-6)
7. <https://www.google.com/search?q=space+definition&sxsrf=AOaemvJCUtDfS7K6xg7bvFxIzhK9FJW9zg%3A1639410218441&ei=Kmq3YYeqGquxqtsPsOKc6Ao&ved=0ahUKEwiH59f9juH0AhWrmGoFHTAxB60Q4dUDCA4&uact=5&oq=space+definition&gs_lcp=Cgdnd3Mtd2l6EAMyEggAEIAEEIcCELEDEBQQRhD5ATIKCAAQgAQQhwIQFDIFCAAQgAQyBQgAEIAEMgUIABCABDIFCAAQgAQyBQgAEIAEMgYIABAHEB4yBggAEAcQHjIGCAAQBxAeOgcIABBHELADOgcIABCwAxBDOggIABDkAhCwAzoKCC4QyAMQsAMQQzoJCAAQDRBGEPkBOgQIABANSgQIQRgASgQIRhgBUMADWM4KYPoLaAJwAngBgAG4AogByAaSAQcyLjMuMC4xmAEAoAEByAERwAEB&sclient=gws-wiz> [↑](#footnote-ref-7)
8. https://www.google.com/search?q=bydefinition&sxsrf=AOaemvIC6dSnVeMkZO0wlH47wbNgFcIzjQ%3A1639411091334&ei=k223YeLmE4e4qtsPtbK\_wAw&ved=0ahUKEwii\_PSdkuH0AhUHnGoFHTXZD8gQ4dUDCA4&uact=5&oq=bydefinition&gs\_lcp=Cgdnd3Mtd2l6EAMyBggAEAcQHjIHCAAQsQMQQzIGCAAQBxAeMgYIABAHEB4yBggAEAcQHjIGCAAQBxAeMgYIABAHEB4yBAgAEAoyBggAEAcQHjIGCAAQBxAeOgcIABBHELADOgcIABCwAxBDSgQIQRgASgQIRhgAUMIDWI0EYNsFaAJwAngAgAFmiAG6AZIBAzEuMZgBAKABAcgBCsABAQ&sclient=gws-wiz [↑](#footnote-ref-8)
9. <https://www.google.com/search?q=private+&sxsrf=AOaemvKrE7ST0w4qUZ-RKdtZn9IgoX7yRg%3A1639411236676&ei=JG63YaHlKOGuqtsP_Per4AI&ved=0ahUKEwihh5zjkuH0AhVhl2oFHfz7CiwQ4dUDCA4&uact=5&oq=private+&gs_lcp=Cgdnd3Mtd2l6EAMyBAgjECcyBAgjECcyCAgAEIAEEMkDMgUIABCSAzIFCAAQkgMyCAguEIAEELEDMggIABCABBCxAzIFCAAQgAQyCAgAEIAEELEDMggIABCABBCxAzoHCAAQRxCwAzoFCAAQkQI6CAguELEDEIMBOg4ILhCABBCxAxDHARCjAjoFCC4QgAQ6CwguEIAEEMcBEKMCOgsILhCABBCxAxCDAToOCC4QgAQQsQMQxwEQ0QM6CAgAELEDEJECOg0IABCABBCHAhCxAxAUOgoIABCABBCHAhAUOgUIABCxA0oECEEYAEoECEYYAFDkBFi_C2CbDWgDcAF4AIAB4wGIAesJkgEFMC42LjKYAQCgAQHIAQjAAQE&sclient=gws-wiz> [↑](#footnote-ref-9)
10. <https://www.google.com/search?q=worker+definition&rlz=1C1CHBF_enUS877US877&oq=worker+definition&aqs=chrome..69i57.3726j0j7&sourceid=chrome&ie=UTF-8> //Xu [↑](#footnote-ref-10)
11. <https://www.lexico.com/en/definition/be>

    #### The neg burden is to prove that the aff won’t logically happen in the status quo, and the aff burden is to prove that it will.

    Top of Form

    Bottom of Form

    #### Prefer:

    #### 1 - Text –

    #### A - Ought is “used to express logical consequence” as defined by Merriam-Webster

    (<http://www.merriam-webster.com/dictionary/ought>) //Massa

    #### B - Oxford Dictionary defines ought as “used to indicate something that is probable.”

    <https://en.oxforddictionaries.com/definition/ought> //Massa

    #### 2 - Debatability –

    #### A - it focuses debates on empirics about squo trends rather than irresolvable abstract principles that’ve been argued for years.

    #### B - moral framework debate is impossible - we can only tell what is from experiences not what ought to be.

    #### 3 - NDC – the aff should have defined ought in the 1ac because it was in the rez so it’s predictable contestation, by not doing so they have forfeited their right to read a new definition – kills 1NC strategy since I premised my engagement on a lack of your definition.

    #### Negate:

    #### Inherency – either A] the aff is non-inherent and you vote neg on presumption or B] it is and it isn’t going to happen so the aff doesn’t solve.

    [↑](#footnote-ref-11)