### 1

#### Interp and Violation: The affirmative must only defend that member nations of the WTO ought to reduce intellectual property protections for medicines and may only garner offense from the hypothetical implementation of the plan – they don’t.

#### "Resolved" requires a policy.

Merriam Webster '18 (Merriam Webster; 2018 Edition; Online dictionary and legal resource; Merriam Webster, "resolve," <https://www.merriam-webster.com/dictionary/resolve;> RP)  
: a legal or official determination especially: a legislative declaration

#### Member nations of the WTO are the 164 countries

https://www.wto.org/english/thewto\_e/whatis\_e/tif\_e/org6\_e.htm

#### Medicines prevent, diagnose, or treat disease and injury

**MRS 20** [(MAINE REVENUE SERVICE SALES, FUEL & SPECIAL TAX DIVISION) “A REFERENCE GUIDE TO THE SALES AND USE TAX LAW” <https://www.maine.gov/revenue/sites/maine.gov.revenue/files/inline-files/Reference%20Guide%202020.pdf> December 2020] SS

[Medicines](https://www.lawinsider.com/dictionary/medicines) means antibiotics, analgesics, antipyretics, stimulants, sedatives, antitoxins, anesthetics, antipruritics, hormones, antihistamines, certain “dermal fillers” (such as BoTox®), injectable contrast agents, vitamins, oxygen, vaccines and other substances that are used in the prevention, diagnosis or treatment of disease or injury and that either (1) require a prescription in order to be purchased or administered to the retail consumer or patient; or (2) are sold in packaging.

#### Intellectual property includes four things

Brewer 19 [(Trevor, advises clients on business structuring and sale transactions, regulatory compliance, third-party contracts, liability protection and general matters facing small business owners. His focus extends beyond legal advice and includes business strategy and wealth preservation.) “WHAT ARE THE FOUR BASIC TYPES OF INTELLECTUAL PROPERTY RIGHTS?” Brewer Long, 5/16/19. <https://brewerlong.com/information/business-law/four-types-of-intellectual-property/>] RR

There are four types of intellectual property rights and protections (although multiple types of intellectual property itself). Securing the correct protection for your property is important, which is why consulting with a lawyer is a must. The four categories of intellectual property protections include:

TRADE SECRETS

Trade secrets refer to specific, private information that is important to a business because it gives the business a competitive advantage in its marketplace. If a trade secret is acquired by another company, it could harm the original holder.

Examples of trade secrets include recipes for certain foods and beverages (like Mrs. Fields’ cookies or Sprite), new inventions, software, processes, and even different marketing strategies.

When a person or business holds a trade secret protection, others cannot copy or steal the idea. In order to establish information as a “trade secret,” and to incur the legal protections associated with trade secrets, businesses must actively behave in a manner that demonstrates their desire to protect the information.

Trade secrets are protected without official registration; however, an owner of a trade secret whose rights are breached–i.e. someone steals their trade secret–may ask a court to ask against that individual and prevent them from using the trade secret.

PATENTS

As defined by the U.S. Patent and Trademark Office (USPTO), a patent is a type of limited-duration protection that can be used to protect inventions (or discoveries) that are new, non-obvious, and useful, such a new process, machine, article of manufacture, or composition of matter.

When a property owner holds a patent, others are prevented, under law, from offering for sale, making, or using the product.

COPYRIGHTS

Copyrights and patents are not the same things, although they are often confused. A copyright is a type of intellectual property protection that protects original works of authorship, which might include literary works, music, art, and more. Today, copyrights also protect computer software and architecture.

Copyright protections are automatic; once you create something, it is yours. However, if your rights under copyright protections are infringed and you wish to file a lawsuit, then registration of your copyright will be necessary.

TRADEMARKS

Finally, the fourth type of intellectual property protection is a trademark protection. Remember, patents are used to protect inventions and discoveries and copyrights are used to protect expressions of ideas and creations, like art and writing.

Trademarks, then, refer to phrases, words, or symbols that distinguish the source of a product or services of one party from another. For example, the Nike symbol–which nearly all could easily recognize and identify–is a type of trademark.

While patents and copyrights can expire, trademark rights come from the use of the trademark, and therefore can be held indefinitely. Like a copyright, registration of a trademark is not required, but registering can offer additional advantages.

#### Vote neg:

#### 1] Clash – argumentative testing along a stable tether and SSD are good – they force debaters to consider a controversial issue from multiple perspectives through nuanced 3rd and 4th level testing that only occurs alongside a stasis point for preparation. Non-T affs allow individuals to establish their own metrics for what they want to debate leading to ideological dogmatism – our argument is that the process of defending and answering proposals against a well-researched opponent is a benefit of engaging the topic regardless of the truth value of those proposals.

#### Use competing interps – topicality is question of models of debate which they should have to proactively justify and we’ll win reasonability links to our offense.

#### They can’t weigh the case—lack of preround prep means their truth claims are untested which you should presume false—they’re also only winning case because we couldn’t engage with it

### Case

#### Extinction outweighs---it’s the upmost moral evil and disavowal of the risk makes it more likely.

Burns 2017 (Elizabeth Finneron-Burns is a Teaching Fellow at the University of Warwick and an Affiliated Researcher at the Institute for Futures Studies in Stockholm, What’s wrong with human extinction?, <http://www.tandfonline.com/doi/pdf/10.1080/00455091.2016.1278150?needAccess=true>, Canadian Journal of Philosophy, 2017)

Many, though certainly not all, people might believe that it would be wrong to bring about the end of the human species, and the reasons given for this belief are various. I begin by considering four reasons that could be given against the moral permissibility of human extinction. I will argue that only those reasons that impact the people who exist at the time that the extinction or the knowledge of the upcoming extinction occurs, can explain its wrongness. I use this conclusion to then consider in which cases human extinction would be morally permissible or impermissible, arguing that there is only a small class of cases in which it would not be wrong to cause the extinction of the human race or allow it to happen. 2.1. It would prevent the existence of very many happy people One reason of human extinction might be considered to be wrong lies in the value of human life itself. The thought here might be that it is a good thing for people to exist and enjoy happy lives and extinction would deprive more people of enjoying this good. The ‘good’ in this case could be understood in at least two ways. According to the first, one might believe that you benefit a person by bringing them into existence, or at least, that it is good for that person that they come to exist. The second view might hold that if humans were to go extinct, the utility foregone by the billions (or more) of people who could have lived but will now never get that opportunity, renders allowing human extinction to take place an incidence of wrongdoing. An example of this view can be found in two quotes from an Effective Altruism blog post by Peter Singer, Nick Beckstead and Matt Wage: One very bad thing about human extinction would be that billions of people would likely die painful deaths. But in our view, this is by far not the worst thing about human extinction. The worst thing about human extinction is that there would be no future generations. Since there could be so many generations in our future, the value of all those generations together greatly exceeds the value of the current generation. (Beckstead, Singer, and Wage 2013) The authors are making two claims. The first is that there is value in human life and also something valuable about creating future people which gives us a reason to do so; furthermore, it would be a very bad thing if we did not do so. The second is that, not only would it be a bad thing for there to be no future people, but it would actually be the worst thing about extinction. Since happy human lives have value, and the number of potential people who could ever exist is far greater than the number of people who exist at any one time, even if the extinction were brought about through the painful deaths of currently existing people, the former’s loss would be greater than the latter’s. Both claims are assuming that there is an intrinsic value in the existence of potential human life. The second claim makes the further assumption that the forgone value of the potential lives that could be lived is greater than the disvalue that would be accrued by people existing at the time of the extinction through suffering from painful and/or premature deaths. The best-known author of the post, Peter Singer is a prominent utilitarian, so it is not surprising that he would lament the potential lack of future human lives per se. However, it is not just utilitarians who share this view, even if implicitly. Indeed, other philosophers also seem to imply that they share the intuition that there is just something wrong with causing or failing to prevent the extinction of the human species such that we prevent more ‘people’ from having the ‘opportunity to exist’. Stephen Gardiner (2009) and Martin O’Neill (personal correspondence), both sympathetic to contract theory, for example, also find it intuitive that we should want more generations to have the opportunity to exist, assuming that they have worth-living lives, and I find it plausible to think that many other people (philosophers and non-philosophers alike) probably share this intuition. When we talk about future lives being ‘prevented’, we are saying that a possible person or a set of possible people who could potentially have existed will now never actually come to exist. To say that it is wrong to prevent people from existing could either mean that a possible person could reasonably reject a principle that permitted us not to create them, or that the foregone value of their lives provides a reason for rejecting any principle that permits extinction. To make the first claim we would have to argue that a possible person could reasonably reject any principle that prevented their existence on the grounds that it prevented them in particular from existing. However, this is implausible for two reasons. First, we can only wrong someone who did, does or will actually exist because wronging involves failing to take a person’s interests into account. When considering the permissibility of a principle allowing us not to create Person X, we cannot take X’s interest in being created into account because X will not exist if we follow the principle. By considering the standpoint of a person in our deliberations we consider the burdens they will have to bear as a result of the principle. In this case, there is no one who will bear any burdens since if the principle is followed (that is, if we do not create X), X will not exist to bear any burdens. So, only people who do/will actually exist can bear the brunt of a principle, and therefore occupy a standpoint that is owed justification. Second, existence is not an interest at all and a possible person is not disadvantaged by not being caused to exist. Rather than being an interest, it is a necessary requirement in order to have interests. Rivka Weinberg describes it as ‘neutral’ because causing a person to exist is to create a subject who can have interests; existence is not an interest itself.3 In order to be disadvantaged, there must be some detrimental effect on your interests. However, without existence, a person does not have any interests so they cannot be disadvantaged by being kept out of existence. But, as Weinberg points out, ‘never having interests itself could not be contrary to people’s interests since without interest bearers, there can be no ‘they’ for it to be bad for’ (Weinberg 2008, 13). So, a principle that results in some possible people never becoming actual does not impose any costs on those ‘people’ because nobody is disadvantaged by not coming into existence.4 It therefore seems that it cannot be wrong to fail to bring particular people into existence. This would mean that no one acts wrongly when they fail to create another person. Writ large, it would also not be wrong if everybody decided to exercise their prerogative not to create new people and potentially, by consequence, allow human extinction. One might respond here by saying that although it may be permissible for one person to fail to create a new person, it is not permissible if everyone chooses to do so because human lives have value and allowing human extinction would be to forgo a huge amount of value in the world. This takes us to the second way of understanding the potential wrongness of preventing people from existing — the foregone value of a life provides a reason for rejecting any principle that prevents it. One possible reply to this claim turns on the fact that many philosophers acknowledge that the only, or at least the best, way to think about the value of (individual or groups of) possible people’s lives is in impersonal terms (Parfit 1984; Reiman 2007; McMahan 2009). Jeff McMahan, for example, writes ‘at the time of one’s choice there is no one who exists or will exist independently of that choice for whose sake one could be acting in causing him or her to exist … it seems therefore that any reason to cause or not to cause an individual to exist … is best considered an impersonal rather than individual-affecting reason’ (McMahan 2009, 52). Another reply along similar lines would be to appeal to the value that is lost or at least foregone when we fail to bring into existence a next (or several next) generations of people with worth-living lives. Since ex hypothesi worth-living lives have positive value, it is better to create more such lives and worse to create fewer. Human extinction by definition is the creation of no future lives and would ‘deprive’ billions of ‘people’ of the opportunity to live worth-living lives. This might reduce the amount of value in the world at the time of the extinction (by killing already existing people), but it would also prevent a much vaster amount of value in the future (by failing to create more people). Both replies depend on the impersonal value of human life. However, recall that in contractualism impersonal values are not on their own grounds for reasonably rejecting principles. Scanlon himself says that although we have a strong reason not to destroy existing human lives, this reason ‘does not flow from the thought that it is a good thing for there to be more human life rather than less’ (104). In contractualism, something cannot be wrong unless there is an impact on a person. Thus, neither the impersonal value of creating a particular person nor the impersonal value of human life writ large could on its own provide a reason for rejecting a principle permitting human extinction. It seems therefore that the fact that extinction would deprive future people of the opportunity to live worth-living lives (either by failing to create either particular future people or future people in general) cannot provide us with a reason to consider human extinction to be wrong. Although the lost value of these ‘lives’ itself cannot be the reason explaining the wrongness of extinction, it is possible the knowledge of this loss might create a personal reason for some existing people. I will consider this possibility later on in section (d). But first I move to the second reason human extinction might be wrong per se. 2.2. It would mean the loss of the only known form of intelligent life and all civilization and intellectual progress would be lost A second reason we might think it would be wrong to cause human extinction is the loss that would occur of the only (known) form of rational life and the knowledge and civilization that that form of life has created. One thought here could be that just as some might consider it wrong to destroy an individual human heritage monument like the Sphinx, it would also be wrong if the advances made by humans over the past few millennia were lost or prevented from progressing. A related argument is made by those who feel that there is something special about humans’ capacity for rationality which is valuable in itself. Since humans are the only intelligent life that we know of, it would be a loss, in itself, to the world for that to end. I admit that I struggle to fully appreciate this thought. It seems to me that Henry Sidgwick was correct in thinking that these things are only important insofar as they are important to humans (Sidgwick 1874, I.IX.4).5 If there is no form of intelligent life in the future, who would there be to lament its loss since intelligent life is the only form of life capable of appreciating intelligence? Similarly, if there is no one with the rational capacity to appreciate historic monuments and civil progress, who would there be to be negatively affected or even notice the loss?6 However, even if there is nothing special about human rationality, just as some people try to prevent the extinction of nonhuman animal species, we might think that we ought also to prevent human extinction for the sake of biodiversity. The thought in this, as well as the earlier examples, must be that it would somehow be bad for the world if there were no more humans even though there would be no one for whom it is bad. This may be so but the only way to understand this reason is impersonally. Since we are concerned with wrongness rather than badness, we must ask whether something that impacts no one’s well-being, status or claims can be wrong. As we saw earlier, in the contractualist framework reasons must be personal rather than impersonal in order to provide grounds for reasonable rejection (Scanlon 1998, 218–223). Since the loss of civilization, intelligent life or biodiversity are per se impersonal reasons, there is no standpoint from which these reasons could be used to reasonably reject a principle that permitted extinction. Therefore, causing human extinction on the grounds of the loss of civilization, rational life or biodiversity would not be wrong. 2.3. Existing people would endure physical pain and/or painful and/or premature deaths Thinking about the ways in which human extinction might come about brings to the fore two more reasons it might be wrong. It could, for example, occur if all humans (or at least the critical number needed to be unable to replenish the population, leading to eventual extinction) underwent a sterilization procedure. Or perhaps it could come about due to anthropogenic climate change or a massive asteroid hitting the Earth and wiping out the species in the same way it did the dinosaurs millions of years ago. Each of these scenarios would involve significant physical and/or non-physical harms to existing people and their interests. Physically, people might suffer premature and possibly also painful deaths, for example. It is not hard to imagine examples in which the process of extinction could cause premature death. A nuclear winter that killed everyone or even just every woman under the age of 50 is a clear example of such a case. Obviously, some types of premature death themselves cannot be reasons to reject a principle. Every person dies eventually, sometimes earlier than the standard expected lifespan due to accidents or causes like spontaneously occurring incurable cancers. A cause such as disease is not a moral agent and therefore it cannot be wrong if it unavoidably kills a person prematurely. Scanlon says that the fact that a principle would reduce a person’s well-being gives that person a reason to reject the principle: ‘components of well-being figure prominently as grounds for reasonable rejection’ (Scanlon 1998, 214). However, it is not settled yet whether premature death is a setback to well-being. Some philosophers hold that death is a harm to the person who dies, whilst others argue that it is not.7 I will argue, however, that regardless of who is correct in that debate, being caused to die prematurely can be reason to reject a principle when it fails to show respect to the person as a rational agent. Scanlon says that recognizing others as rational beings with interests involves seeing reason to preserve life and prevent death: ‘appreciating the value of human life is primarily a matter of seeing human lives as something to be respected, where this involves seeing reasons not to destroy them, reasons to protect them, and reasons to want them to go well’ (Scanlon 1998, 104). The ‘respect for life’ in this case is a respect for the person living, not respect for human life in the abstract. This means that we can sometimes fail to protect human life without acting wrongfully if we still respect the person living. Scanlon gives the example of a person who faces a life of unending and extreme pain such that she wishes to end it by committing suicide. Scanlon does not think that the suicidal person shows a lack of respect for her own life by seeking to end it because the person whose life it is has no reason to want it to go on. This is important to note because it emphasizes the fact that the respect for human life is person-affecting. It is not wrong to murder because of the impersonal disvalue of death in general, but because taking someone’s life without their permission shows disrespect to that person. This supports its inclusion as a reason in the contractualist formula, regardless of what side ends up winning the ‘is death a harm?’ debate because even if death turns out not to harm the person who died, ending their life without their consent shows disrespect to that person. A person who could reject a principle permitting another to cause his or her premature death presumably does not wish to die at that time, or in that manner. Thus, if they are killed without their consent, their interests have not been taken into account, and they have a reason to reject the principle that allowed their premature death.8 This is as true in the case of death due to extinction as it is for death due to murder. However, physical pain may also be caused to existing people without killing them, but still resulting in human extinction. Imagine, for example, surgically removing everyone’s reproductive organs in order to prevent the creation of any future people. Another example could be a nuclear bomb that did not kill anyone, but did painfully render them infertile through illness or injury. These would be cases in which physical pain (through surgery or bombs) was inflicted on existing people and the extinction came about as a result of the painful incident rather than through death. Furthermore, one could imagine a situation in which a bomb (for example) killed enough people to cause extinction, but some people remained alive, but in terrible pain from injuries. It seems uncontroversial that the infliction of physical pain could be a reason to reject a principle. Although Scanlon says that an impact on well-being is not the only reason to reject principles, it plays a significant role, and indeed, most principles are likely to be rejected due to a negative impact on a person’s well-being, physical or otherwise. It may be queried here whether it is actually the involuntariness of the pain that is grounds for reasonable rejection rather than the physical pain itself because not all pain that a person suffers is involuntary. One can imagine acts that can cause physical pain that are not rejectable — base jumping or life-saving or improving surgery, for example. On the other hand, pushing someone off a cliff or cutting him with a scalpel against his will are clearly rejectable acts. The difference between the two cases is that in the former, the person having the pain inflicted has consented to that pain or risk of pain. My view is that they cannot be separated in these cases and it is involuntary physical pain that is the grounds for reasonable rejection. Thus, the fact that a principle would allow unwanted physical harm gives a person who would be subjected to that harm a reason to reject the principle. Of course the mere fact that a principle causes involuntary physical harm or premature death is not sufficient to declare that the principle is rejectable — there might be countervailing reasons. In the case of extinction, what countervailing reasons might be offered in favour of the involuntary physical pain/ death-inducing harm? One such reason that might be offered is that humans are a harm to the natural environment and that the world might be a better place if there were no humans in it. It could be that humans might rightfully be considered an all-things-considered hindrance to the world rather than a benefit to it given the fact that we have been largely responsible for the extinction of many species, pollution and, most recently, climate change which have all negatively affected the natural environment in ways we are only just beginning to understand. Thus, the fact that human extinction would improve the natural environment (or at least prevent it from degrading further), is a countervailing reason in favour of extinction to be weighed against the reasons held by humans who would experience physical pain or premature death. However, the good of the environment as described above is by definition not a personal reason. Just like the loss of rational life and civilization, therefore, it cannot be a reason on its own when determining what is wrong and countervail the strong personal reasons to avoid pain/death that is held by the people who would suffer from it.9 Every person existing at the time of the extinction would have a reason to reject that principle on the grounds of the physical pain they are being forced to endure against their will that could not be countervailed by impersonal considerations such as the negative impact humans may have on the earth. Therefore, a principle that permitted extinction to be accomplished in a way that caused involuntary physical pain or premature death could quite clearly be rejectable by existing people with no relevant countervailing reasons. This means that human extinction that came about in this way would be wrong. There are of course also additional reasons they could reject a similar principle which I now turn to address in the next section. 2.4. Existing people could endure non-physical harms I said earlier than the fact in itself that there would not be any future people is an impersonal reason and can therefore not be a reason to reject a principle permitting extinction. However, this impersonal reason could give rise to a personal reason that is admissible. So, the final important reason people might think that human extinction would be wrong is that there could be various deleterious psychological effects that would be endured by existing people having the knowledge that there would be no future generations. There are two main sources of this trauma, both arising from the knowledge that there will be no more people. The first relates to individual people and the undesired negative effect on well-being that would be experienced by those who would have wanted to have children. Whilst this is by no means universal, it is fair to say that a good proportion of people feel a strong pull towards reproduction and having their lineage continue in some way. Samuel Scheffler describes the pull towards reproduction as a ‘desire for a personalized relationship with the future’ (Scheffler 2012, 31). Reproducing is a widely held desire and the joys of parenthood are ones that many people wish to experience. For these people knowing that they would not have descendants (or that their descendants will endure painful and/or premature deaths) could create a sense of despair and pointlessness of life. Furthermore, the inability to reproduce and have your own children because of a principle/policy that prevents you (either through bans or physical interventions) would be a significant infringement of what we consider to be a basic right to control what happens to your body. For these reasons, knowing that you will have no descendants could cause significant psychological traumas or harms even if there were no associated physical harm. The second is a more general, higher level sense of hopelessness or despair that there will be no more humans and that your projects will end with you. Even those who did not feel a strong desire to procreate themselves might feel a sense of hopelessness that any projects or goals they have for the future would not be fulfilled. Many of the projects and goals we work towards during our lifetime are also at least partly future-oriented. Why bother continuing the search for a cure for cancer if either it will not be found within humans’ lifetime, and/or there will be no future people to benefit from it once it is found? Similar projects and goals that might lose their meaning when confronted with extinction include politics, artistic pursuits and even the type of philosophical work with which this paper is concerned. Even more extreme, through the words of the character Theo Faron, P.D. James says in his novel The Children of Men that ‘without the hope of posterity for our race if not for ourselves, without the assurance that we being dead yet live, all pleasures of the mind and senses sometimes seem to me no more than pathetic and crumbling defences shored up against our ruins’ (James 2006, 9). Even if James’ claim is a bit hyperbolic and all pleasures would not actually be lost, I agree with Scheffler in finding it not implausible that the knowledge that extinction was coming and that there would be no more people would have at least a general depressive effect on people’s motivation and confidence in the value of and joy in their activities (Scheffler 2012, 43). Both sources of psychological harm are personal reasons to reject a principle that permitted human extinction. Existing people could therefore reasonably reject the principle for either of these reasons. Psychological pain and the inability to pursue your personal projects, goals, and aims, are all acceptable reasons for rejecting principles in the contractualist framework. So too are infringements of rights and entitlements that we accept as important for people’s lives. These psychological reasons, then, are also valid reasons to reject principles that permitted or required human extinction.

#### That is the only egalitarian metric---anything else collapses cooperation on collective action crises and makes extinction inevitable

Khan 18 (Risalat, activist and entrepreneur from Bangladesh passionate about addressing climate change, biodiversity loss, and other existential challenges. He was featured by The Guardian as one of the “young climate campaigners to watch” (2015). As a campaigner with the global civic movement Avaaz (2014-17), Risalat was part of a small core team that spearheaded the largest climate marches in history with a turnout of over 800,000 across 2,000 cities. After fighting for the Paris Agreement, Risalat led a campaign joined by over a million people to stop the Rampal coal plant in Bangladesh to protect the Sundarbans World Heritage forest, and elicited criticism of the plant from Crédit Agricolé through targeted advocacy. Currently, Risalat is pursuing an MPA in Environmental Science and Policy at Columbia University as a SIPA Environmental Fellow, “5 reasons why we need to start talking about existential risks,” https://www.weforum.org/agenda/2018/01/5-reasons-start-talking-existential-risks-extinction-moriori/)

Infinite future possibilities I find the story of the Moriori profound. It teaches me two lessons. Firstly, that human culture is far from immutable. That we can struggle against our baser instincts. That we can master them and rise to unprecedented challenges. Secondly, that even this does not make us masters of our own destiny. We can make visionary choices, but the future can still surprise us. This is a humbling realization. Because faced with an uncertain future, the only wise thing we can do is prepare for possibilities. Standing at the launch pad of the Fourth Industrial Revolution, the possibilities seem endless. They range from an era of abundance to the end of humanity, and everything in between. How do we navigate such a wide and divergent spectrum? I am an optimist. From my bubble of privilege, life feels like a rollercoaster ride full of ever more impressive wonders, even as I try to fight the many social injustices that still blight us. However, the accelerating pace of change amid uncertainty elicits one fundamental observation. Among the infinite future possibilities, only one outcome is truly irreversible: extinction. Concerns about extinction are often dismissed as apocalyptic alarmism. Sometimes, they are. But repeating that mankind is still here after 70 years of existential warning about nuclear warfare is a straw man argument. The fact that a 1000-year flood has not happened does not negate its possibility. And there have been far too many nuclear near-misses to rest easy. As the World Economic Forum’s Annual Meeting in Davos discusses how to create a shared future in a fractured world, here are five reasons why the possibility of existential risks should raise the stakes of conversation: 1. Extinction is the rule, not the exception More than 99.9% of all the species that ever existed are gone. Deep time is unfathomable to the human brain. But if one cares to take a tour of the billions of years of life’s history, we find a litany of forgotten species. And we have only discovered a mere fraction of the extinct species that once roamed the planet. In the speck of time since the first humans evolved, more than 99.9% of all the distinct human cultures that have ever existed are extinct. Each hunter-gatherer tribe had its own mythologies, traditions and norms. They wiped each other out, or coalesced into larger formations following the agricultural revolution. However, as major civilizations emerged, even those that reached incredible heights, such as the Egyptians and the Romans, eventually collapsed. It is only in the very recent past that we became a truly global civilization. Our interconnectedness continues to grow rapidly. “Stand or fall, we are the last civilization”, as Ricken Patel, the founder of the global civic movement Avaaz, put it. 2. Environmental pressures can drive extinction More than 15,000 scientists just issued a ‘warning to humanity’. They called on us to reduce our impact on the biosphere, 25 years after their first such appeal. The warning notes that we are far outstripping the capacity of our planet in all but one measure of ozone depletion, including emissions, biodiversity, freshwater availability and more. The scientists, not a crowd known to overstate facts, conclude: “soon it will be too late to shift course away from our failing trajectory, and time is running out”. In his 2005 book Collapse, Jared Diamond charts the history of past societies. He makes the case that overpopulation and resource use beyond the carrying capacity have often been important, if not the only, drivers of collapse. Even though we are making important incremental progress in battles such as climate change, we must still achieve tremendous step changes in our response to several major environmental crises. We must do this even while the world’s population continues to grow. These pressures are bound to exert great stress on our global civilization. 3. Superintelligence: unplanned obsolescence? Imagine a monkey society that foresaw the ascendance of humans. Fearing a loss of status and power, it decided to kill the proverbial Adam and Eve. It crafted the most ingenious plan it could: starve the humans by taking away all their bananas. Foolproof plan, right? This story describes the fundamental difficulty with superintelligence. A superintelligent being may always do something entirely different from what we, with our mere mortal intelligence, can foresee. In his 2014 book Superintelligence, Swedish philosopher Nick Bostrom presents the challenge in thought-provoking detail, and advises caution. Bostrom cites a survey of industry experts that projected a 50% chance of the development of artificial superintelligence by 2050, and a 90% chance by 2075. The latter date is within the life expectancy of many alive today. Visionaries like Stephen Hawking and Elon Musk have warned of the existential risks from artificial superintelligence. Their opposite camp includes Larry Page and Mark Zuckerberg. But on an issue that concerns the future of humanity, is it really wise to ignore the guy who explained the nature of space to us and another guy who just put a reusable rocket in it? 4. Technology: known knowns and unknown unknowns Many fundamentally disruptive technologies are coming of age, from bioengineering to quantum computing, 3-D printing, robotics, nanotechnology and more. Lord Martin Rees describes potential existential challenges from some of these technologies, such as a bioengineered pandemic, in his book Our Final Century. Imagine if North Korea, feeling secure in its isolation, could release a virulent strain of Ebola, engineered to be airborne. Would it do it? Would ISIS? Projecting decades forward, we will likely develop capabilities that are unthinkable even now. The unknown unknowns of our technological path are profoundly humbling. 5. 'The Trump Factor' Despite our scientific ingenuity, we are still a confused and confusing species. Think back to two years ago, and how you thought the world worked then. Has that not been upended by the election of Donald Trump as US President, and everything that has happened since? The mix of billions of messy humans will forever be unpredictable. When the combustible forces described above are added to this melee, we find ourselves on a tightrope. What choices must we now make now to create a shared future, in which we are not at perpetual risk of destroying ourselves? Common enemy to common cause Throughout history, we have rallied against the ‘other’. Tribes have overpowered tribes, empires have conquered rivals. Even today, our fiercest displays of unity typically happen at wartime. We give our lives for our motherland and defend nationalistic pride like a wounded lion. But like the early Morioris, we 21st-century citizens find ourselves on an increasingly unstable island. We may have a violent past, but we have no more dangerous enemy than ourselves. Our task is to find our own Nunuku’s Law. Our own shared contract, based on equity, would help us navigate safely. It would ensure a future that unleashes the full potential of our still-budding human civilization, in all its diversity. We cannot do this unless we are humbly grounded in the possibility of our own destruction. Survival is life’s primal instinct. In the absence of a common enemy, we must find common cause in survival. Our future may depend on whether we realize this.

#### The world is getting better

Nicholas Kristof, This Has Been the Best Year Ever, 12/28**/19**, New York Times

\*Language modified

If you’re depressed by the state of the world, let me toss out an idea: In the long arc of human history, 2019 has been the best year ever.

The bad things that you fret about are true. But it’s also true that since modern humans emerged about 200,000 years ago, 2019 was probably the year in which children were least likely to die, adults were least likely to be illiterate and people were least likely to suffer excruciating and disfiguring diseases.

Every single day in recent years, another 325,000 people got their first access to electricity. Each day, more than 200,000 got piped water for the first time. And some 650,000 went online for the first time, every single day.

Perhaps the greatest calamity for anyone is to lose a child. That used to be common: Historically, almost half of all humans died in childhood. As recently as 1950, 27 percent of all children still died by age 15. Now that figure has dropped to about 4 percent.

“If you were given the opportunity to choose the time you were born in, it’d be pretty risky to choose a time in any of the thousands of generations in the past,” noted Max Roser, an Oxford University economist who runs the Our World in Data website. “Almost everyone lived in poverty, hunger was widespread and famines common.”

But … but … but President Trump! But climate change! War in Yemen! Starvation in Venezuela! Risk of nuclear war with North Korea. …

All those are important concerns, and that’s why I write about them regularly. Yet I fear that the news media and the humanitarian world focus so relentlessly on the bad news that we leave the public believing that every trend is going in the wrong direction. A majority of Americans say in polls that the share of the world population living in poverty is increasing — yet one of the trends of the last 50 years has been a huge reduction in global poverty.

As recently as 1981, 42 percent of the planet’s population endured “extreme poverty,” defined by the United Nations as living on less than about $2 a day. That portion has plunged to less than 10 percent of the world’s population now.

Every day for a decade, newspapers could have carried the headline “Another 170,000 Moved Out of Extreme Poverty Yesterday.” Or if one uses a higher threshold, the headline could have been: “The Number of People Living on More Than $10 a Day Increased by 245,000 Yesterday.”

Many of those moving up are still very poor, of course. But because they are less poor, they are less likely to remain illiterate or to starve: People often think that famine is routine, but the last famine recognized by the World Food Program struck just part of one state in South Sudan and lasted for only a few months in 2017.

Diseases like polio, leprosy, river blindness and elephantiasis are on the decline, and global efforts have turned the tide on AIDS. A half century ago, a majority of the world’s people had always been illiterate; now we are approaching 90 percent adult literacy. There have been particularly large gains in girls’ education — and few forces change the world so much as education and the empowerment of women.

You may feel uncomfortable reading this. It can seem tasteless, misleading or counterproductive to hail progress when there is still so much wrong with the world. I get that. In addition, the numbers are subject to debate and the 2019 figures are based on extrapolation. But I worry that deep pessimism about the state of the world is ~~paralyzing~~ disempowering rather than empowering; excessive pessimism can leave people feeling not just hopeless but also helpless.

Readers constantly tell me, for example, that if we save children’s lives, the result will be a population crisis that will cause new famines. They don’t realize that when parents are confident that their children will survive, and have access to birth control, they have fewer children. Bangladesh was once derided by Henry Kissinger as a “basket case,” yet now its economy grows much faster than America’s and Bangladeshi women average just 2.1 births (down from 6.9 in 1973).

Yes, it’s still appalling that a child dies somewhere in the world every six seconds — but consider that just a couple of decades ago, a child died every three seconds. Recognizing that progress is possible can be a spur to do more, and that’s why I write this annual reminder of gains against the common enemies of humanity.

Climate change remains a huge threat to our globe, as does compassion fatigue in the rich world, and it’s likely that we will miss a United Nations target of eliminating extreme poverty by 2030. Meanwhile, here in the United States, Trump presents a continuing challenge to our institutions, and millions of families have been left behind and are struggling. We should keep pressing on all these fronts (the last one concerns me enough that it’s the topic of my new book), but we’ll get a morale boost if we acknowledge the backdrop of hard-won improvement.

“We are some of the first people in history who have found ways to make progress against these problems,” says Roser, the economist. “We have changed the world. How awesome is it to be alive at a time like this?”

“Three things are true at the same time,” he added. “The world is much better, the world is awful, the world can be much better.”

#### Empirics outweigh everything – they take into account every factor, which predictive evidence can’t.

#### Capitalism is self-correcting and sustainable – war and environmental destruction are not profitable and innovation solves their impacts

Kaletsky ’11 (Anatole, editor-at-large of *The Times* of London, where he writes weekly columns on economics, politics, and international relationsand on the governing board of the New York-based Institute for New Economic Theory (INET), a nonprofit created after the 2007-2009 crisis to promote and finance academic research in economics, Capitalism 4.0: The Birth of a New Economy in the Aftermath of Crisis, p. 19-21)

Democratic capitalism is a system built for survival. It has adapted successfully to shocks of every kind, to upheavals in technology and economics, to political revolutions and world wars. Capitalism has been able to do this because, unlike communism or socialism or feudalism, it has an inner dynamic akin to a living thing. It can adapt and refine itself in response to the changing environment. And it will evolve into a new species of the same capitalist genus if that is what it takes to survive. In the panic of 2008—09, many politicians, businesses, and pundits forgot about the astonishing adaptability of the capitalist system. Predictions of global collapse were based on static views of the world that extrapolated a few months of admittedly terrifying financial chaos into the indefinite future. The self-correcting mechanisms that market economies and democratic societies have evolved over several centuries were either forgotten or assumed defunct. The language of biology has been applied to politics and economics, but rarely to the way they interact. Democratic capitalism’s equivalent of the biological survival instinct is a built-in capacity for solving social problems and meeting material needs. This capacity stems from the principle of competition, which drives both democratic politics and capitalist markets. Because market forces generally reward the creation of wealth rather than its destruction, they direct the independent efforts and ambitions of millions of individuals toward satisfying material demands, even if these demands sometimes create unwelcome by-products. Because voters generally reward politicians for making their lives better and safer, rather than worse and more dangerous, democratic competition directs political institutions toward solving rather than aggravating society’s problems, even if these solutions sometimes create new problems of their own. Political competition is slower and less decisive than market competition, so its self-stabilizing qualities play out over decades or even generations, not months or years. But regardless of the difference in timescale, capitalism and democracy have one crucial feature in common: Both are mechanisms that encourage individuals to channel their creativity, efforts, and competitive spirit into finding solutions for material and social problems. And in the long run, these mechanisms work very well. If we consider democratic capitalism as a successful problem-solving machine, the implications of this view are very relevant to the 2007-09 economic crisis, but diametrically opposed to the conventional wisdom that prevailed in its aftermath. Governments all over the world were ridiculed for trying to resolve a crisis caused by too much borrowing by borrowing even more. Alan Greenspan was accused of trying to delay an inevitable "day of reckoning” by creating ever-bigger financial bubbles. Regulators were attacked for letting half-dead, “zombie” banks stagger on instead of putting them to death. But these charges missed the point of what the democratic capitalist system is designed to achieve. In a capitalist democracy whose raison d’etre is to devise new solutions to long-standing social and material demands, a problem postponed is effectively a problem solved. To be more exact, a problem whose solution can be deferred long enough is a problem that is likely to be solved in ways that are hardly imaginable today. Once the self-healing nature of the capitalist system is recognized, the charge of “passing on our problems to our grand-children”—whether made about budget deficits by conservatives or about global warming by liberals—becomes morally unconvincing. Our grand-children will almost certainly be much richer than we are and will have more powerful technologies at their disposal. It is far from obvious, therefore, why we should make economic sacrifices on their behalf. Sounder morality, as well as economics, than the Victorians ever imagined is in the wistful refrain of the proverbially optimistic Mr. Micawber: "Something will turn up."

#### Next, CCS. Markets are key.

Gregory F. Nemet et al., Associate Professor, La Follette School of Public Affairs, University of Wisconsin–Madison, Martina Kraus, German Institute for Economic Research Vera Zipperer, German Institute for Economic Research, November, 2016, The Valley of Death, the Technology Pork Barrel, and Public Support for Large Demonstration Projects, La Follette School Working Paper No. 2016-007

Because the ultimate (but not immediate) goal of supporting demonstrations is to facilitate widespread adoption, demand and thus markets are of course key (Kingsley et al., 1996). In climate change, policies are central to those markets (Taylor et al., 2003; Zhou et al., 2015), thus credibility in those policies is also central (Rai et al., 2010; Finon, 2012). But it is striking how many demonstration programs confronted markets that involved negative shocks around the time that projects came on-line—we see it in synfuels, biofuels, and solar thermal electricity (Figure 9), and CCS (Figure 10). The 1.9 year average lag from project initiation to time on-line is crucial. It would be a mistake to assume a Hotelling price path in which prices of an exhaustible resource (e.g. oil, atmospheric storage of CO2) rise at a constant pure rate of time preference. In this case the relevant price is the level at which avoided CO2 emissions are remunerated. Rather the experience of the past suggests we are more likely to see shocks and boom–bust cycles (Krautkraemer, 1998; Zaklan et al., 2011). We see it in our data in the prices related to each demonstration program (Figure 8). Lupion and Herzog (2013) attribute the failure of the NER300 program to stimulate the construction of any CCS projects to 4 factors: competition with renewables, project complexity, low carbon prices, and a combination of fiscal austerity and weak climate policy around the global financial crisis. Note that three of the four problems involved future demand, not the funding structure itself. Demonstrations need markets that pay off innovation investments not just under a steadily increasing Hotelling-style market, but under a broad range of market conditions. Features of robust demand pull include niche markets (Kemp et al., 1998), hedging across jurisdictions (Nemet, 2010), and flexible production (Sanchez and Kammen, 2016). Government price guarantees have played an important role as we have seen on synfuels, solar thermal electricity, and on a smaller scale, photovoltaics.

#### Try or die for CCS to solve warming

Moniz 9/23/19 - 13th Secretary of Energy (2013 to 2017) and is the founder and CEO of the Energy Futures Initiative

Fredd Krupp is president of the Environmental Defense Fund, Ernest Moniz, “Cutting Climate Pollution Isn’t Enough — We Also Need Carbon Removal,” Text, TheHill, September 23, 2019, <https://thehill.com/opinion/energy-environment/462609-cutting-climate-pollution-isnt-enough-we-also-need-carbon-removal>.

It has been almost four years since the Paris climate agreement was signed. But as leaders gather in New York this week for the United Nations Climate Change Summit, the world remains far off track from meeting the Paris objective of limiting global warming to well below 2 degrees Celsius -- and pursuing efforts at 1.5 degrees.

To meet that target, the world must achieve a 100 percent clean economy — one that produces net zero emissions, or no more climate pollution than can be removed from the atmosphere — soon after mid-century, with the United States and other advanced economies reaching that milestone no later than 2050. It’s a daunting but doable task.

The consequences of falling short are enormous. This year, the U.S. government’s fourth National Climate Assessment documented the huge economic and social impacts of unchecked warming. The Pentagon has repeatedly warned of the impacts on national security and our troops.

Achieving a 100 percent clean economy will require a swift transition to renewables and other zero-carbon energy sources. But we also need to face the reality that meeting the Paris target will require taking carbon out of the atmosphere at massive scale. In part, that’s because eliminating emissions will be very challenging for some sectors, especially the transportation industry and agriculture. Removing carbon from the atmosphere would also bring concentrations down, helping to stabilize the climate at safer levels. So, the push for clean energy must be supplemented by a suite of technologies known as carbon dioxide removal (CDR).

It is not a question of what we’d prefer. It’s a question of insurmountable math.

The crucial role carbon removal must play is becoming more widely recognized. The 2018 Intergovernmental Panel on Climate Change report stressed the importance of carbon removal, and the U.S. National Academies of Sciences, Engineering and Medicine late last year estimated that ten billion tons of CO2 will need to be pulled from the atmosphere annually by 2050, and double that by 2100. For context, today’s global emissions are less than 40 billion tons per year. If the 10 billion tons of CO2 from CDR were stored underground, that would be roughly double the world’s annual oil production.

The good news is that there are a surprisingly large number of promising pathways for carbon dioxide removal. Nature-based approaches include reforestation and forest management as well as agricultural practices that increase carbon stored in soils. Some of the attendant challenges include competition for land and permanence of the carbon sequestration.

Technological approaches include direct air capture — machines that actually suck carbon from the air — and technologically-enhanced natural processes, such as plants genetically modified with deep roots to fix carbon in the soil; enhanced mineralization, which uses certain reactive rocks to bind with carbon from the air; and accelerated ocean uptake in phytoplankton. These technologies are immature and require considerable research, development and demonstration to ensure viability and affordability at very large scale.

Despite the urgency, there is no dedicated federal effort to develop these crucial technologies; existing programs are piecemeal and largely focused on sequestering emissions from industrial and electricity generating sources.

The National Academies recommended the rapid establishment of a robust, focused, scalable and accelerated federal research program spanning the Departments of Energy and Agriculture, the National Oceanic and Atmospheric Administration and the National Science Foundation, among others. Such a program would encompass the full range of technological pathways that can remove CO2 from the environment. ‘’Clearing the Air,’’ an analysis of CDR’s value and a proposed plan to deploy it, has been completed by the Energy Futures Initiative. Over the next decade, the program scale would be about a billion dollars a year.

Carbon dioxide removal is not a magic bullet. We must do everything we can to deploy innovative low- and zero-carbon methods to generate electricity, heat homes, fuel vehicles, and power industry, creating new economic opportunities in the process. Tackling the climate crisis also requires placing a declining limit and a price on carbon pollution, as well as a significant increase in energy technology innovation and deployment across the board.

But CDR is also not a “Plan B.” It is a critical part of any “Plan A” for climate, a necessary complement to emission reduction. It can provide more flexibility and optionality in policy planning, which could ease the transition to a carbon-neutral economy while minimizing transition costs and providing greater assurance that science-based climate goals can be met in a timely manner. It would eventually enable a net negative global economy that could bring the atmospheric carbon concentrations down — and global temperatures with it.

We have delayed meaningful action for far too long. As a result, the scale and urgency of the challenge is such that we cannot simply work on doing better in the future. We need to correct what we did in the past. Carbon removal is the enabler.

#### Extinction

Yangyang Xu 17, Assistant Professor of Atmospheric Sciences at Texas A&M University; and Veerabhadran Ramanathan, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography, University of California, San Diego, 9/26/17, “Well below 2 °C: Mitigation strategies for avoiding dangerous to catastrophic climate changes,” Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 39, p. 10315-10323

We are proposing the following extension to the DAI risk categorization: warming greater than 1.5 °C as “dangerous”; warming greater than 3 °C as “catastrophic?”; and warming in excess of 5 °C as “unknown??,” with the understanding that changes of this magnitude, not experienced in the last 20+ million years, pose existential threats to a majority of the population. The question mark denotes the subjective nature of our deduction and the fact that catastrophe can strike at even lower warming levels. The justifications for the proposed extension to risk categorization are given below.

From the IPCC burning embers diagram and from the language of the Paris Agreement, we infer that the DAI begins at warming greater than 1.5 °C. Our criteria for extending the risk category beyond DAI include the potential risks of climate change to the physical climate system, the ecosystem, human health, and species extinction. Let us first consider the category of catastrophic (3 to 5 °C warming). The first major concern is the issue of tipping points. Several studies (48, 49) have concluded that 3 to 5 °C global warming is likely to be the threshold for tipping points such as the collapse of the western Antarctic ice sheet, shutdown of deep water circulation in the North Atlantic, dieback of Amazon rainforests as well as boreal forests, and collapse of the West African monsoon, among others. While natural scientists refer to these as abrupt and irreversible climate changes, economists refer to them as catastrophic events (49).

Warming of such magnitudes also has catastrophic human health effects. Many recent studies (50, 51) have focused on the direct influence of extreme events such as heat waves on public health by evaluating exposure to heat stress and hyperthermia. It has been estimated that the likelihood of extreme events (defined as 3-sigma events), including heat waves, has increased 10-fold in the recent decades (52). Human beings are extremely sensitive to heat stress. For example, the 2013 European heat wave led to about 70,000 premature mortalities (53). The major finding of a recent study (51) is that, currently, about 13.6% of land area with a population of 30.6% is exposed to deadly heat. The authors of that study defined deadly heat as exceeding a threshold of temperature as well as humidity. The thresholds were determined from numerous heat wave events and data for mortalities attributed to heat waves. According to this study, a 2 °C warming would double the land area subject to deadly heat and expose 48% of the population. A 4 °C warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented, such as providing air conditioning to the entire population or a massive relocation of most of the population to safer climates.

Climate risks can vary markedly depending on the socioeconomic status and culture of the population, and so we must take up the question of “dangerous to whom?” (54). Our discussion in this study is focused more on people and not on the ecosystem, and even with this limited scope, there are multitudes of categories of people. We will focus on the poorest 3 billion people living mostly in tropical rural areas, who are still relying on 18th-century technologies for meeting basic needs such as cooking and heating. Their contribution to CO2 pollution is roughly 5% compared with the 50% contribution by the wealthiest 1 billion (55). This bottom 3 billion population comprises mostly subsistent farmers, whose livelihood will be severely impacted, if not destroyed, with a one- to five-year megadrought, heat waves, or heavy floods; for those among the bottom 3 billion of the world’s population who are living in coastal areas, a 1- to 2-m rise in sea level (likely with a warming in excess of 3 °C) poses existential threat if they do not relocate or migrate. It has been estimated that several hundred million people would be subject to famine with warming in excess of 4 °C (54). However, there has essentially been no discussion on warming beyond 5 °C.

Climate change-induced species extinction is one major concern with warming of such large magnitudes (>5 °C). The current rate of loss of species is ∼1,000-fold the historical rate, due largely to habitat destruction. At this rate, about 25% of species are in danger of extinction in the coming decades (56). Global warming of 6 °C or more (accompanied by increase in ocean acidity due to increased CO2) can act as a major force multiplier and expose as much as 90% of species to the dangers of extinction (57).

The bodily harms combined with climate change-forced species destruction, biodiversity loss, and threats to water and food security, as summarized recently (58), motivated us to categorize warming beyond 5 °C as unknown??, implying the possibility of existential threats. Fig. 2 displays these three risk categorizations (vertical dashed lines).

#### Rejection of capitalism causes massive transition wars

Harris 03. Lee, Analyst – Hoover Institution and Author of The Suicide of Reason, “The Intellectual Origins of America-Bashing”, Policy Review, January, http://www.hoover.org/publications/policyreview/3458371.html

This is the immiserization thesis of Marx. And it is central to revolutionary Marxism, since if capitalism produces no widespread misery, then it also produces no fatal internal contradiction: If everyone is getting better off through capitalism, who will dream of struggling to overthrow it? Only genuine misery on the part of the workers would be sufficient to overturn the whole apparatus of the capitalist state, simply because, as Marx insisted, the capitalist class could not be realistically expected to relinquish control of the state apparatus and, with it, the monopoly of force. In this, Marx was absolutely correct. No capitalist society has ever willingly liquidated itself, and it is utopian to think that any ever will. Therefore, in order to achieve the goal of socialism, nothing short of a complete revolution would do; and this means, in point of fact, a full-fledged civil war not just within one society, but across the globe. Without this catastrophic upheaval, capitalism would remain completely in control of the social order and all socialist schemes would be reduced to pipe dreams.

#### Extinction

Nyquist 5. J.R. renowned expert in geopolitics and international relations, WorldNetDaily contributing editor, “The Political Consequences of a Financial Crash,” February 4, www.financialsense.com/stormw...2005/0204.html

Should the United States experience a severe economic contraction during the second term of President Bush, the American people will likely support politicians who advocate further restrictions and controls on our market economy – guaranteeing its strangulation and the steady pauperization of the country. In Congress today, Sen. Edward Kennedy supports nearly all the economic dogmas listed above. It is easy to see, therefore, that the coming economic contraction, due in part to a policy of massive credit expansion, will have serious political consequences for the Republican Party (to the benefit of the Democrats). Furthermore, an economic contraction will encourage **the formation of anti-capitalist majorities and a turning away from the free market system. The danger here is not merely economic. The political left openly favors the collapse of America’s strategic position abroad. The withdrawal of the United States from the Middle East, the Far East and Europe would catastrophically impact an international system that presently allows 6 billion people to live on the earth’s surface in relative peace. Should anti-capitalist dogmas overwhelm the global market and trading system that evolved under American leadership, the planet’s economy would contract and untold millions would die of starvation. Nationalistic totalitarianism, fueled by a politics of blame, would once again bring war to Asia and Europe.** But **this time the war would be waged with mass destruction weapons** and the United States would be blamed because it is the center of global capitalism. Furthermore, **if the anti-capitalist party gains power in Washington, we can expect to see policies of appeasement and unilateral disarmament enacted. American appeasement and disarmament, in this context, would be an admission of guilt before the court of world opinion. Russia and China,** above all, **would exploit this** admission **to justify aggressive wars, invasions and mass destruction attacks**. A future financial crash, therefore, must be prevented at all costs.

#### Independently profit motive key to effective resource management

Fitzmaurice 15. Matthew, CEO, EcoAlpha Asset Management LLC. “ONLY CAPITALISM CAN SAVE THE PLANET,” Ensla. 3/23/2015. http://ensia.com/voices/only-capitalism-can-save-the-planet/

Here’s the thing, though: where there are problems to be solved, there’s money to be made. And where there’s money to be made, we awaken one of the world’s most powerful forces for change: capitalism. ¶ Of course capitalism has played a starring role in distressing the planet’s resources. Historically, the combination of unchecked industry, a readiness to externalize costs and a relentless thirst for growth have plundered and polluted the earth. It’s not a debate, but simple fact that our population size and economies cannot continue on their present trajectories without exhausting the world’s resources. Yet, a rapidly expanding global middle class — increasingly urbanized and hungry for protein — threatens further and accelerating distress. ¶ The hopeful news is that businesses, with their almost singular focus on economic self-interest, and governments, motivated by a variety of interests, are beginning to recognize and address in earnest these inevitable problems. ¶ Today, the businesses that develop practical and affordable solutions to burdened resource problems will end up being the world’s most profitable companies. No longer can they be considered “sustainability” businesses. They are everyday businesses with a long view, targeting problems that are not going away. That’s smart business. Burdened resources have become a strong economic driver for businesses of all sizes, in all industries everywhere to spend and change — and one that will only grow in scope and intensity over time. ¶ The companies that provide effective solutions to burdened resources will provide superior risk-adjusted returns to their investors as business and governments accelerate their solutions spending out of their own economic self-interest. And because the products, technologies and services these companies provide are common solutions to global problems — and are therefore exponentially repeatable — these investments will have amplified positive impact on global resource scarcity issues. ¶ Too often people have a narrow view of these solutions, thinking only of solar panels and windmills. But solutions are enormously diverse: They include, among many others, agricultural drones that monitor soil conditions, smart irrigation technology that delivers water only where and when it’s really needed, more efficient distributed energy generation and component suppliers that make cars use less gas. ¶ We face a new reality in which our economic self-interest and the long-term well-being of the planet are coming into alignment.¶ As a whole, the human race has a poor track record when it comes to altruism. Although there are a great many saints among us who spend — and even sacrifice — their lives to help others, most of us are hard pressed to take care of ourselves and our families. We have a much better track record when it comes to investing money in our own self- interest, which has fueled the unprecedented innovation, economic and life-expectancy growth of the past century. ¶ In the past, many people who invested in sustainable solutions were motivated principally by conscience, willing to accept reduced returns in order to invest their money in a way that was consistent with their beliefs and convictions — be they religious, social or environmental. Now, however, we face a new reality in which our economic self-interest and the long-term well-being of the planet are coming into alignment. Because we have to face the reality of burdened resources, there’s money in it. ¶ Recently, some asset managers have based investments on environmental, social and governance screening, betting that good corporate citizens are inherently better-managed companies, which will therefore be more profitable over time. Increasingly, however, ESG screening is becoming more pervasive and will likely over time become commonplace, robbing this sort of screening as a differentiator when making investment decisions. ¶ The primary goal for investing in sustainable solutions is to achieve superior risk-adjusted returns. Companies that provide solutions to the issues of burdened resources will be the recipients of a massive global spend cycle, no matter one’s motivation. The fact that one’s investment is also part of the solution rather than the problem is worth getting excited about. Self-interest is what moves markets. According to McKinsey’s report, How to make Green Growth the new normal, “In order to mobilize the US$3 trillion a year that will be needed to build a resource-efficient growth model, investing in the markets of the future needs to be seen as possessing superior risk-return characteristics.”¶ No government subsidy or charity case can move the needle for long. Only capitalism has the power to retool industries, reshape economies and rebuild infrastructure across the planet. It’s a big part of what got us into this mess, but it’s also what will get us out.

#### Ineffective resource management degrades public health, kills global air quality, and causes tensions over water scarcity in South Asia—culminates in extinction

Thompson 13. Thomas, President of Analytics Inc., a financial research and economic analysis firm. Citing Wang Shucheng, China’s former minister of water resources. “Choking on China,” Foreign Affairs. 6/8/2013. https://www.foreignaffairs.com/articles/china/2013-04-08/choking-china

The dangers of China’s environmental degradation go well beyond the country’s borders, as pollution threatens global health more than ever. Chinese leaders have argued that their country has the right to pollute, claiming that, as a developing nation, it cannot sacrifice economic growth for the sake of the environment. In reality, however, China is holding the rest of the world hostage -- and undermining its own prosperity.¶ According to the World Bank, only one percent of China’s 560 million urban residents breathe air considered safe by EU standards. Beijing’s levels of PM2.5s -- particles that are smaller than 2.5 micrometers in diameter and can penetrate the gas exchange regions of the lungs -- are the worst in the world. Beijing’s 2012 March average reading was 469 micrograms of such particles per cubic meter, which compares abysmally with Los Angeles’ highest 2012 reading of 43 micrograms per cubic meter.¶ Such air pollution contributed to 1.2 million premature deaths in China in 2010, according to the Global Burden of Disease Study. The unrelenting pace of construction of coal-fired power plants is only making matters worse. In his recent monograph, Climate Change: The China Problem, environmental scholar Michael Vandenbergh writes, “On average, a new coal-powered electric plant large enough to serve a city the size of Dallas opens in China every seven to ten days.” The lack of widespread coal-washing infrastructure and scrubbers at Chinese industrial facilities exacerbates the problem.¶ Carbon dioxide emissions from cars in China are also growing exponentially, replacing coal-fired power plants as the major source of pollution in major Chinese cities. Deutsche Bank estimates that the number of passenger cars in China will reach 400 million by 2030, up from today’s 90 million. And the sulfur levels produced by diesel trucks in China are at least 23 times worse than those in the United States. Acid rain, caused by these emissions, has damaged a third of China’s limited cropland, in addition to forests and watersheds on the Korean Peninsula and in Japan. This pollution reaches the United States as well, sometimes at levels prohibited by the U.S. Clean Water Act. In 2006, researchers at the University of California–Davis discovered that almost all of the harmful particulates over Lake Tahoe originated in China. The environmental experts Juli Kim and Jennifer Turner note in their essay “China’s Filthiest Export” that “by the time it reaches the U.S., mercury transforms into a reactive gaseous material that dissolves easily in the wet climates of the Pacific Northwest.” At least 20 percent of the mercury entering the Willamette River in Oregon most likely comes from China. Black carbon soot from China also threatens to block sunlight, lower crop yields, heat the atmosphere, and destabilize weather throughout the Pacific Rim.¶ China’s use of fresh water resources also threatens those beyond its borders. As Mark Twain reportedly said, in reference to California in the late nineteenth century, “Whiskey is for drinking; water is for fighting over.” The sentiment holds true in modern-day Asia as well. Asia’s per capita fresh water availability is less than half the global average. China and India, for example, are home to 40 percent of the world’s population but make do with ten percent of the world’s fresh water. China is guzzling and polluting this limited resource at an alarming rate. The country has dammed every major river on the Tibetan plateau, including the Mekong, the Salween, the Brahmaputra, the Yangtze, the Yellow, the Indus, the Sutlej, the Shweli, and the Karnali, and there are large-scale plans to dam others. Of the 50,000 largest dams in the world, more than half are in China. As a result, China now controls the river water supply to 13 nearby countries but so far has refused to sign any treaties or cooperate with other countries on water issues. Beijing also voted against the UN attempt to regulate water sharing in the region. China’s former minister of water resources, Wang Shucheng, described China’s water policy as “fight for every drop of water or die.” This philosophy, combined with China’s unabated pursuit of economic development, will have profoundly destabilizing consequences

for the region, both politically and environmentally.¶ Unfortunately for China, compromising the environment and health in pursuit of economic growth is not a sustainable strategy. The threat of water scarcity and the adverse domestic health effects of pollution darken China’s future. Pollution-related illnesses are soaring. A recent social media campaign led by locals and international activities shed light on the growing phenomena of “cancer villages” -- areas where water pollution is so bad that it has led to a sharp rise in diseases like stomach cancer. China’s own Ministry of Environmental Protection has concluded that 70 percent of the country’s major waterways are heavily polluted. According to Scott Moore of the Sustainability Science Program at Harvard’s Kennedy School of Government, pollutants have even seeped into the country’s subsurfaces, with more than half of monitored wells deemed unsafe to use for drinking water. The China Geological Survey now estimates that 90 percent of China’s cities depend on polluted groundwater supplies. Water that has been purified at treatment plants is often recontaminated en route to homes. China has plundered its groundwater reserves, drilling massive underground tunnels that have even caused some cities to literally sink.¶ China has also completely botched its waste-removal efforts. Eighty percent of the East China Sea, one of the world’s largest fisheries, is now unsuitable for fishing, according to Elizabeth C. Economy, a China and environmental expert at the Council on Foreign Relations. Most Chinese coastal cities pump at least half of their waste directly into the ocean, which causes red tides and coastal fish die-offs. According to the World Wildlife Fund, the country is now the largest polluter of the Pacific Ocean.¶ The economic costs of pollution have been the focus of various government-backed studies in China. A recent study by the Chinese Academy of Environmental Planning found that environmental damage to forests, wetlands, and grasslands shaved 3.5 percent off China’s 2012 GDP. The World Bank puts the total cost of China’s environmental degradation in the late 1990s at between 3.5 and 8 percent of GDP. China’s pollution problem is holding back its economy -- and poisoning its own people and the rest of the world in the process. The international community should push China to realize that if it continues to ravage the environment, it will be unable to secure its future health and prosperity -- or avoid a global disaster.

#### Neoliberalism key to space colonization – commercial exchanges promote development

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Once human settlements on nearby celestial bodies are established, their commercial exchanges with Earth will become an issue. Space migrants who choose to leave Earth and settle in an uncomfortable concrete or metal base on the Moon or Mars must have very strong incentives to step forth for such breathtaking adventure. There seems to be no greater reward than the lucrative economic opportunities found in a settlement on an alien surface full of potential resources.¶ The positive economic exchange rate with the Earth may assure the continuation and even expansion of space settlements on celestial bodies. Otherwise, settlers either will depend on equipment and reinforcements from Earth or go bankrupt. This may shed light on the importance of adopting suitable legal regime for human space settlements that, on one hand, fuels the needed investments for establishment of space settlements and, on the other hand, helps the efforts of inhabitants those settlements flourish economically and leads ultimately to their self-sufficiency.¶ There is sufficient evidence to suggest that the legal framework of a free market economic system incredibly suits the requirements of human settlements in space, since freedom of business and market innovation, together with recognition of private property, are the key elements in making the humans the first known spacefaring intelligent species.¶ Finally, the matter of the administrative legal regime of space settlements is another noteworthy issue to be considered. This matter, which is mainly categorized within the realm of administrative law, has attracted less attention in comparison with other legal aspects of outer space activities, but in no way should its importance and impact on future space settlement be disregarded.

#### Solves all extinction scenarios.

#### Baum 09

– (2009, Seth, visiting scholar at Columbia University's Center for Research on Environmental Decisions, PhD candidate in Geography with a focus on risk analysis, “Cost–benefit analysis of space exploration: Some ethical considerations,” Space Policy Volume 25, Issue 2, May 2009, Pages 75-80, science direct Ajones)

Another non-market benefit of space exploration is reduction in the risk of the extinction of humanity and other Earth-originating life. Without space colonization, the survival of humanity and other Earth-originating life becomes extremely difficult- perhaps impossible- over the very long-term. This is because the Sun, like all stars, changes in its composition and radiative output over time. The Sun is gradually converting hydrogen into helium, thereby getting warmer. In approximately 500 million to one billion years, this warming is projected to render Earth uninhabitable to life as we know it [25–26]. Humanity, if it still exists on Earth then, could conceivably develop technology by then to survive on Earth despite these radical conditions. Such technology may descend from present proposals to “geoengineer” the planet in response to anthropogenic climate change [27–28].3 However, the Sun later- approximately seven billion years later- loses mass that spreads into Earth’s orbit, causing Earth to slow, be pulled into the Sun, and evaporate. The only way life could survive on Earth may be if Earth, by sheer coincidence (the odds are on the order of one in 105 to one in 106 [29]) happens to be pulled out of the solar system by a star system that passes by. This process might enable life to survive on Earth much longer, although the chance of this is quite remote. While space colonization would provide a hedge against these very long-term astrological threats, it would also provide a hedge against the more immediate threats that face humanity and other species. These threats include nuclear warfare, pandemics, anthropogenic climate change, and disruptive technology [30]. Because these threats would generally only affect life on Earth and not life elsewhere,4 self-sufficient space colonies would survive these catastrophes, enabling life to persist in the universe. For this reason, space colonization has been advocated as a means of ensuring long-term human survival [32–33]. Space exploration projects can help increase the probability of long-term human survival in other ways as well: technology developed for space exploration is central to proposals to avoid threats from large comet and asteroid impacts [34–35]. However, given the goal of increasing the probability of long-term human survival by a certain amount, there may be more cost-effective options than space colonization (with costs defined in terms of money, effort, or related measures). More cost-effective options may include isolated refuges on Earth to help humans survive a catastrophe [36] and materials to assist survivors, such as a how-to manual for civilization [37] or a seed bank [38]. Further analysis is necessary to determine the most cost-effective means of increasing the probability of long-term human survival.

#### No epistemology indicts — all empirical measures show market epistemology is superior to their utopian project

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In fact, economic history is a long record of government policies that failed because they were designed with a bold disregard for the laws of economics. It is impossible to understand the history of economic thought if one does not pay attention to the fact that economics as such is a challenge to the conceit of those in power. An economist can never be a favorite of autocrats and demagogues. With them he is always the mischief-maker, and the more they are inwardly convinced that his objections are well founded, the more they hate him. Ludwig von Mises Is this statement of Mises one of ideology or science? The politically cor-rect answer would be that this is just another example of Mises's exces- sive ideological commitment to laissez faire. But as with much in modern intellectual life, the desire not to offend produces polite but flawed argu-ment at the expense of the harsh truth of the matter. The choice of eco-nomic policy may be a matter of democratic decision making, but the consequences of economic policy on human well-being certainly is not. And once we recognize that, then the analysis of the development of eco-nomic doctrine and evolution of political economy in the 20th century looks totally different. The breakdown of the Keynesian consensus in the 1970s, the collapse of communism in the 1980s and the wide-spread reco-gnition of the failure of development planning in the 1990s, point 21st century political economy in a direction that would be a radical depar-ture from the path it was set on at the beginning of the 20th, when an almost blind-faith in the ability of democratic government to correct social ills captured the imagination of the intellectual elites. The lesson of the 20th century for political economy should be one of humility and restraint. The fatal conceit of the 20th century which sought to unleash the power of the government elites to do "good" in the name of the masses must give way to a contemporary version of the 18th and 19th century pro-ject of constraining the power of the state and its elites, and unleashing the productive potential of the masses. "The curious task of economics," Hayek has written, "is to demons- trate to men how little they really know about what they imagine they can design." [(1988, p. 76]. But if economic science doesn't exist inde- pendently from the democratic will of the citizens, then such a task is not just curious, but absurd. Enter Kenneth Hoover's Economics as Ideology. At one level this is a fascinating book, dealing with an important subject, and approaching it in a unique way. The role of ideology in science, and how different thinkers of the past can shape the contemporary political climate is indeed a worthy subject of serious study. Moreover, the attempt to explain how the personal biographies of thinkers shape their own iden- tity and thus ideology is also important. Unfortunately, there is also the problem of truth in scientific discovery. All the good will in the world doesn't matter if the theory advocated is simply in conflict with reality. William Easterly, for example, in dealing with the post-WWII era efforts to orchestrate economic development in the 3rd world refers to the "car-tel of good intentions." (2002) One of the first principles of political eco- nomy is that intentions do not equal results - this is true for the central mystery of political economy (how individuals pursuing their own inter-ests, and only their own interests, can within certain institutional envi-ronments generate outcomes which are socially desirable) and for the central tragedy (how individuals can in striving to promote the public good generate unintended undesirable consequences). There are syste-mic forces that are in operation in political economy and they exist inde-pendent of the wishful thinking of participants in the political-economic nexus. Hoover doesn't appear to recognize this fundamental point in political economy and thus his effort to understand the development of modern political economy is flawed from the start. Let me focus on my criticism first and then I will end highlighting aspects which I think the reader can benefit from in reading his book nevertheless. First, the selection of subjects is bizarre from the beginning if we are going to talk about economic science and its relation to public policy debates. Certainly Keynes and Hayek belong, but Laski has no claim whatsoever to being an original thinker in economics. He was a political theorists and political activist and had little to nothing to say about technical economics. Keynes and Hayek, however, were first and foremost skilled technical economists who utilized the knowledge they had gleaned from technical economics to make policy relevant contribu- tions. In short, it is on the basis of sound economic reasoning that they were able to make policy relevant arguments to their contemporaries. But except for a paragraph here or there, the technical economics of Keynes and Hayek are passed over in this book to focus instead on their political affiliations and political influence (Keynes with the democratic center, Hayek with the hard right - Laski is given the hard left) and we are treated to asserted arguments about how personal psychology impac- ted their position.1 We are treated to these figures as political theorists or rather political icons of movements that identified with them. This enables Hoover's choice of thinkers to have some coherence, though the reason for both Keynes's and Hayek's influence are going to get inadequate treat- ment as a consequence. Second, Hoover is only apparently asking a question about the evolu- tion of ideas and ideological influence. But a reader can sense from the second paragraph of the preface where Hoover's sympathies personally lay on the policy questions of the day. He laments that the ideological pendulum has swung too far to the right and then he states plainly that "On a moment's reflection, it is clear that governments do good things, as well as bad. And markets likewise are Janus-faced, sometimes provi- dent, other times the wastrel." (p. xi) In other words, Hoover has an ans- wer to his question before he asks it. Political economy is to serve as a means for human betterment within the context of democratic delibera- tion among citizens. These deliberations must be rational and not prone to ideological excess if they are going to generate understanding among citizens of "the need for a complex interweaving of institutions, processes, and constitutional safeguards so that the excesses of any one institution may be limited, while its virtues are brought to the service of society." (p. 270) Who, the reader must ask, could ever be against limiting abuse and encouraging virtue? Nobody can be against the exercising of wisdom, courage and public spiritedness in making political decisions. But in Hoover's treatment both Laski and Hayek are going to be found wanting in this regard because ideological theorizing in their name can be abused by politicians on the left and right - as Hoover argues we have seen2 - and thus only Keynes is left to rationally mediate between the two extremes of socialism and libertarianism. Overly ideological thinking is what causes problems in democratic deliberation, according to Hoover. Third, Hoover relies on psycho-historical analysis, rather than an exa- mination of economic doctrine and empirical studies, to explain how Keynes, Laski and Hayek came to adopt the ideological positions they represented in public debate. There is no denying that personal expe- rience shapes the way individuals form their identity and thus their ideo- logy. There is also no denying that reading personal histories can be engaging and intellectually rewarding. But can we really say that Hayek's libertarianism has as much to do with his desire to justify his divorce as his life-long commitment to the ideals of liberty? ! (p. 229) Did Keynes's supreme belief in the power of his own intellect and his flaunting of tra- ditional morality all prepare him for the advocacy of rational delibera- tion over values in a democratic manner that came to be the hallmark of progressive politics in the contemporary world? This is all fun to read, but I would rather see the answer to Keynes and Hayek in the different philosophical doctrines they adhered to as reflected in their writings from early on, and the technical arguments in economics they put forth and what they learned as theorists during debates with colleagues in the 1920s- 1940s. Their understanding of the teachings of the science of economics, not the personal psychologies of Keynes and Hayek, explain their res- pective positions in contemporary politics, and the lack of understan- ding ofbasic economics explains Laski's policy positions. Not is all is lost in reading this book. It does benefit the reader. First, it is well written and the personal histories are interesting — though any serious scholar of the different thinkers would have already encountered the material either in primary documents or in previous biographies. In short, no new biographical information is unearthed in Hoover's book. But the way he weaves it with the development of doctrine and in parti- cular in the clash between these different thinkers during the 1930s and 1940s provides a rewarding read. Second, putting the question of ideology and its role in political eco- nomy on the table is welcomed. But here again, I think Hoover could have benefited from examining what economists have had to say about this and in particular the work of Joseph Schumpeter, History of Economic Analysis (1954). Schumpeter argued that ideology is often indispensable to science because it provides the raw material for scientific analysis. Ideological vision in Schumpeter's terminology is a pre-analytic cogni- tive act that is a necessary though not sufficient step in economics analy- sis. Ideology is capable of providing the analyst with questions to be worked through in a non-ideological manner with economic reasoning. But without the ideological vision in the first place the questions would not be raised and the science of economics may well stall.3 In Hoover's presentation, however, ideology exerts its power only in a negative man- ner - by distorting rational discourse and clouding reality. This is too easy, and it also overlooks the basic fact that science needs raw material to work with if it is going to make progress. Moreover, the act of clai- ming that one occupies the sane rational middle is an ideological trick in its own right to present ones intellectual opponents as irrational extre- mists. Rational assessment of the logic of an argument and differing empi- rical interpretations offered is dismissed in favor of a rhetorical strategy that classifies opponents rather than engages them. As with many of the arguments in this book, it is my assessment that Hoover often believes a position (e.g., the effectiveness of Keynesian consensus policies) is sett- led when in fact it is precisely that position which is under contestation in the scientific community of economists. It is my belief that Hoover is led to this, and other positions in his book that I find objectionable, because he fails to see economics as a discipline which can provide us with knowledge equivalent in ontological stature to the law of gravity and that democratic deliberations often produce economic policies that are the equivalent of engineering proposals for human beings to float rather than walk or drive to their next destination.4 If my characterization is correct, then as we saw in the quote from Mises, the economists will find themselves in opposition to proposed policy solutions to right this or that perceived social wrong. The economist is put in the unenviable position of reminding fellow citizens that wishing it so doesn't necessarily make it so. The science of economics puts para-meters on our utopias, and those who advocate Utopian solutions cannot stand any suggestion that their plan for the future is unworkable. The discipline of economics in addition to providing a critique, also suggests that any alternative arrangement being proposed must specify the insti-tutional mechanisms by which incentives between actors will become aligned and the correct information will flow to right actors in time for them to make appropriate decisions or learn from their previous decisions that mistakes were made so the appropriate adjustments will be made. If no mechanism is in place, then incentive incompatibilities and coordination failures will result so that no matter how beautiful the proposed policy might appear on paper the solution will be one of economic waste and political opportunism. Because Hoover's book doesn't deal with econo- mic science in such a sustain way, it cannot at the end of the day explain the evolution of modern economic thought and without that there is no way to understand the creation of contemporary politics in the wake of the breakdown of the Keynesian consensus in the 1970s, the collapse of communism in the 1980s and the realization of the tragic failure of deve-lopment planning in the third world in the 1990s. Economic reality, it turns out, more than psycho-history is the best way to understand the way the world work. **(footnote 4):** 4. The distinction between ontology and epistemology are often forgotten in discussions of the methodology and philosophy of the social sciences. We come to know the laws of gravity in a manner different than we come to know the law of demand (question of epistemology), but the forces at work that are described by the law of gravity and the law of demand are nevertheless real in the same way (question of ontology). The argu- ment for methodological dualism between the natural and social sciences that was made by Mises and then Hayek crucially relies on this distinction between ontology and epistemology. In other words, economics is capable of establishing laws that have the same ontological claim as those derived in physics, but they are arri-ved at through procedures of inquiry entirely different from those employed in the natural sciences.