## Off

### 1NC – T

#### Interpretation and violation – the aff must only defend that the appropriation of outer space by private entities is unjust through the hypothetical implementation of a topical plan

#### “Resolved” denotes a formal resolution.

**AWS ’13** [Army Writing Style; August 24th; Online resource dedicated to all major writing requirements in the Army; Army Writing Style, "Punctuation — The Colon and Semicolon," <https://armywritingstyle.com/punctuation-the-colon-and-semicolon/>]

The colon introduces the following:

a.  A list, but only after "as follows," "the following," or a noun for which the list is an appositive: Each scout will carry the following: (colon) meals for three days, a survival knife, and his sleeping bag. The company had four new officers: (colon) Bill Smith, Frank Tucker, Peter Fillmore, and Oliver Lewis.

b.  A long quotation (one or more paragraphs): In The Killer Angels Michael Shaara wrote: (colon) You may find it a different story from the one you learned in school. There have been many versions of that battle [Gettysburg] and that war [the Civil War]. (The quote continues for two more paragraphs.)

c.  A formal quotation or question: The President declared: (colon) "The only thing we have to fear is fear itself." The question is: (colon) what can we do about it?

d.  A second independent clause which explains the first: Potter's motive is clear: (colon) he wants the assignment.

e.  After the introduction of a business letter: Dear Sirs: (colon) Dear Madam: (colon) f.  The details following an announcement For sale: (colon) large lakeside cabin with dock

g.  A formal resolution, after the word "resolved:". Resolved: (colon) That this council petition the mayor.

#### Resolved means the aff must use the law – they can’t defend the resolution as a descriptive statement

Find Law No Date, “Resolve, ”https://dictionary.findlaw.com/definition/resolve.html#:~:text=1%20%3A%20to%20deal%20with%20successfully,resolved%20itself%20into%20a%20committee%5D

**re·solved** re·solv·ing vt 1 : to deal with successfully : clear up [ a dispute] 2 a : to declare or decide by formal resolution and vote b : to change by resolution or formal vote [the house resolved itself into a committee] vi : to form a resolution n 1 : something that is resolved 2 : **a legal or official determination** ;**esp : a legislative declaration**

#### Appropriation means use or permanent occupation

Babcock 19 Professor of Law, Georgetown University Law Cente. Babcock, Hope M. "The Public Trust Doctrine, Outer Space, and the Global Commons: Time to Call Home ET." Syracuse L. Rev. 69 (2019): 191.

Article II is one of those succeeding provisions that curtails “the freedom of use outlined in Article [I] by declaring that outer space, including the [m]oon and other celestial bodies, is not subject to national appropriation.”147 It flatly prohibits national appropriation of any celestial body in outer space “by means of use or occupation, or by any other means.”148 However, “many types of ‘use’ or ‘exploitation’. . . are inconceivable without appropriation of some degree at least of any materials taken,” like ore or water.149 If this view of Article II’s prohibitory language is correct, then “it is not at all farfetched to say that the OST actually installs a blanket prohibition on many beneficial forms of development.”150 However, the OST only prohibits an appropriation that constitutes a “long-term use and permanent occupation, to the exclusion of all others.”151

#### Aff teams must defend legal action by a government

John Bouvier 56 [The Free Dictionary, “Unjust”] [DS] [https://legal-dictionary.thefreedictionary.com/Unjust#:~:text=UNJUST.,test%20of%20right%20and%20wrong.]

Unjust Also found in: Dictionary, Thesaurus, Wikipedia. Related to Unjust: Unjust enrichment UNJUST. That which is done against the perfect rights of another; that which is against the established law; that which is opposed to a law which is the test of right and wrong.

#### Extra topicality independently links to our offense – it allows the affirmative to add on random unpredictable planks to generate extra advantages and solve net benefits, which ruins neg preparation, especially when the majority of their offense and framing comes from the extra-topical part. The aff says they defend a rejection of capitalism, which goes beyond appropriation.

#### TVA – just ban space appropriation by rejecting its foundation in capitalism – use sufficiency when evaluating the TVA because all deficits are neg ground. SSD solves their offense since they can read their aff on the neg.

#### There are three impacts –

#### 1] Fairness – unlimited aff choice shifts the goalposts for topical debate. Pre-tournament negative preparation is structured around topical plans. Fairness is an intrinsic good—-debate is fundamentally a game and requires effective competition between the aff and the neg—-the only way for any benefit to be produced from debate is if the judge can make a decision between two sides who have had a relatively equal chance to prepare for a common point of debate.

#### 2] Clash---advocacy tied to the resolution incentivizes nuanced research and CLASH with a well prepared opponent---They turn debate into one with no negative counterargumentation which causes confirmation bias and less good affirmatives. It also doesn’t subject the aff to rigorous arugmentation which eliminates the skills necessary to make real material change in the world and doesn’t generate real productive discussions – turns their offense.

#### 3] Movements -- activism requires learning to defend a proposal against rigorous negation to develop skills for strategy, organizing, problem-solving, using resources, and creating coalitions

Lakey 13. (George Lakey co-founded Earth Quaker Action Group which just won its five-year campaign to force a major U.S. bank to give up financing mountaintop removal coal mining. Along with college teaching he has led 1,500 workshops on five continents and led activist projects on local, national, and international levels. Among many other books and articles, he is author of “Strategizing for a Living Revolution” in David Solnit’s book Globalize Liberation. 8 skills of a well-trained activist. June 11, 2013. <https://wagingnonviolence.org/feature/8-skills-of-a-well-trained-activist/>)

Why more training now? The history of training is a history of playing catch-up. Very few movements seem to realize that the pace of change can accelerate so rapidly that it outstrips the movement’s ability to use its opportunities fully. In Istanbul a small group of environmentalists sit down to save a park, and suddenly there are protests in over 60 Turkish cities; the agenda expands, from green space to governance to capitalism; doors open everywhere. It would be a good moment to have tens of thousands of skilled organizers ready to seize the day, supporting smart direct action and building prefigurative institutions. But excitement alone may slacken; as with the Occupy movement, spontaneous creativity has its limits. With the right skills, movements can sustain themselves for years against punishing, murderous resistance. The mass direct action phase of the civil rights movement pushed on effectively for a decade after 1955. Mass excitement doesn’t need to fizzle in a year. A movement thrives by solving the problems it faces. Anti-authoritarians don’t want to count on a movement’s top leaders to be the problem-solvers, but instead to develop shared leadership by fostering problem-solving smarts at the grassroots. There’s nothing automatic about grassroots problem-solving. How well people strategize, organize, invent creative tactics, reach effectively to allies, use the full resources of the group and persevere at times of discouragement — all that can be enhanced by training. Nothing is more predictable than that there will be increased turbulence in the United States and many other societies. Activists cause some of the turbulence by rising up; other turbulence results from things like climate change, the 1 percent’s austerity programs and other forces outside activists’ immediate control. Increased turbulence scares a lot of people. It’s only natural that people will look around for reassurance. The ruling class will offer one kind of reassurance. The big question is: What reassurance will the movement offer? When students in Paris in May 1968 launched a campaign that quickly moved into nationwide turbulence, with 11 million workers striking and occupying, there was a momentary chance for the middle class to side with the students and workers instead of siding with the 1 percent. The movement, though, didn’t understand enough about the basic human need for security and failed to use its opportunity. That was a strategic error, but to choose a different path the movement would have required participants with more skills. Training would have been necessary. We can learn from this, inventory the skills needed and train ourselves accordingly. What is training ready to do for us? Here are a few of the key benefits that we should expect to gain from one another through training: 1. Increase the creativity of direct action strategy and tactics. The Yes Men and the Center for Story-Based Strategy lead workshops in which activist groups break out of the lockstep of “marches-and-rallies.” We need to have a broad array of tactics at our disposal, and we have to be ready to invent new ones when necessary. 2. Prepare participants psychologically for the struggle. The Pinochet regime in Chile depended, as dictatorships usually do, on fear to maintain its control. In the 1980s a group committed to nonviolent struggle encouraged people to face their fears directly in a three-step process: small group training sessions in living rooms, followed by “hit-and-run” nonviolent actions, followed by debriefing sessions. By teaching people to control their fear, trainers were building a movement to overthrow the dictator. 3. Develop group morale and solidarity for more effective action. In 1991 members of ACT UP — a militant group protesting U.S. AIDS policy — were beaten up by Philadelphia police during a demonstration. The police were found guilty of using unnecessary force and the city paid damages, but ACT UP members realized they could reduce the chance of future brutality by working in a more united and nonviolent way. Before their next major action they invited a trainer to conduct a workshop where they clarified the strategic question of nonviolence and then role-played possible scenarios. The result: a high-spirited, unified and effective action. 4. Deepen participants’ understanding of the issues. The War Resisters League’s Handbook for Nonviolent Action is an example of the approach that takes even a civil disobedience training as an opportunity to assist participants to take a next step regarding racism, sexism and the like. When we understand how seemingly separate struggles are connected, it helps us create a broader, stronger, more interconnected movement. 5. Build skills for applying nonviolent action in situations of threat and turbulence. In Haiti a hit squad abducted a young man just outside the house where a trained peace team was staying; the team immediately intervened and, although surrounded by twice their number of guards with weapons, succeeded in saving the man from being hung. Through training, we can learn how to react to emergencies like this in disciplined, effective ways. 6. Build alliances across movement lines. In Seattle in the 1980s, a workshop drew striking workers from the Greyhound bus company and members of ACT UP. The workshop reduced the prejudice each group had about the other, and it led some participants to support each other’s struggle. Trainings are a valuable opportunity to bring people from different walks of life together and help them work toward their common goals. 7. Create activist organizations that don’t burn people out. The Action Mill, Spirit in Action, and the Stone House all offer workshops to help activists to stay active in the long run. I’ve seen a lot of accumulated skill lost to movements over the years because people didn’t have the support or endurance to stay in the fight. 8. Increase democracy within the movement. In the 1970s the Movement for a New Society developed a pool of training tools and designs that it shared with the grassroots movement against nuclear power. The anti-nuclear movement went up against some of the largest corporations in America and won. The movement delayed construction, which raised costs, and planted so many seeds of doubt in the public mind about safety that the eventual meltdown of the Three Mile Island plant brought millions of people to the movement’s point of view. The industry’s goal of building 1,000 nuclear plants evaporated. Significantly, the campaign succeeded without needing to create a national structure around a charismatic leader. Activists learned the skills of shared leadership and democratic decision-making through workshops, practice and feedback. In my book Facilitating Group Learning, I share many lessons that have evolved from Freire’s day to ours. I hope that readers of this column will add to the list of training providers in the comments, since I’ve only named some. My intention is to remind us that this could be the right moment, before the next wave of turbulence has all of us in crisis-mode again, to increase training capacity for grassroots skill-building. We’ll be very glad we did.

#### Topicality must be a voting issue—the role of the ballot is to vote for whoever does the better debating over the resolutional question. Any aff role for debate must explain why we switch sides and why there has to be a winner and a loser—switching sides within the competitive yet limited bounds of the topic performs the labor of the negative which avoids group polarization and untested advocacy

#### T is an issue of competing interpretations because reasonability invites arbitrary judge intervention based on preference rather than argumentation and encourages a race to the bottom in which debaters will exploit a judge’s tolerance for questionable argumentation. No impact turns on T – it’s a strategy we’ve proposed in response to the 1AC, not a rule we’re imposing against them – they don’t get to weigh the case either since T is a gateway issue.

### 1NC – CP

#### CP: We endorse the affirmative without the statement that the appropriation of outer space through asteroid mining by private entities is unjust. All other forms of appropriation of outer space by private entities are unjust.

#### That solves – they have one card about space in the aff, which only says capitalist companies are entering space, not that space itself is uniquely key – means they don’t solve their impacts if they don’t do anything beyond private appropriation, and if they do then the PIC solves.

#### Commercial mining solves extinction from scarcity, climate, terror, war, and disease.

Pelton 17—(Director Emeritus of the Space and Advanced Communications Research Institute at George Washington University, PHD in IR from Georgetown).. Pelton, Joseph N. 2017. The New Gold Rush: The Riches of Space Beckon! Springer. Accessed 8/30/19.

Are We Humans Doomed to Extinction? What will we do when Earth’s resources are used up by humanity? The world is now hugely over populated, with billions and billions crammed into our overcrowded cities. By 2050, we may be 9 billion strong, and by 2100 well over 11 billion people on Planet Earth. Some at the United Nations say we might even be an amazing 12 billion crawling around this small globe. And over 80 % of us will be living in congested cities. These cities will be ever more vulnerable to terrorist attack, natural disaster, and other plights that come with overcrowding and a dearth of jobs that will be fueled by rapid automation and the rise of artifi cial intelligence across the global economy. We are already rapidly running out of water and minerals. Climate change is threatening our very existence. Political leaders and even the Pope have cautioned us against inaction. Perhaps the naysayers are right. All humanity is at tremendous risk. Is there no hope for the future? This book is about hope. We think that there is literally heavenly hope for humanity. But we are not talking here about divine intervention. We are envisioning a new space economy that recognizes that there is more water in the skies that all our oceans. Th ere is a new wealth of natural resources and clean energy in the reaches of outer space—more than most of us could ever dream possible. There are those that say why waste money on outer space when we have severe problems here at home? Going into space is not a waste of money. It is our future. It is our hope for new jobs and resources. The great challenge of our times is to reverse public thinking to see space not as a resource drain but as the doorway to opportunity. The new space frontier can literally open up a “gold rush in the skies.” In brief, we think there is new hope for humanity. We see a new a pathway to the future via new ventures in space. For too long, space programs have been seen as a money pit. In the process, we have overlooked the great abundance available to us in the skies above. It is important to recognize there is already the beginning of a new gold rush in space—a pathway to astral abundance. “New Space” is a term increasingly used to describe radical new commercial space initiatives—many of which have come from Silicon Valley and often with backing from the group of entrepreneurs known popularly as the “space billionaires.” New space is revolutionizing the space industry with lower cost space transportation and space systems that represent significant cost savings and new technological breakthroughs. “New Commercial Space” and the “New Space Economy” represent more than a new way of looking at outer space. These new pathways to the stars could prove vital to human survival. If one does not believe in spending money to probe the mysteries of the universe then perhaps we can try what might be called “calibrated greed” on for size. One only needs to go to a cubesat workshop, or to Silicon Valley or one of many conferences like the “Disrupt Space” event in Bremen, Germany, held in April 2016 to recognize that entrepreneurial New Space initiatives are changing everything [ 1 ]. In fact, the very nature and dimensions of what outer space activities are today have changed forever. It is no longer your grandfather’s concept of outer space that was once dominated by the big national space agencies. The entrepreneurs are taking over. The hopeful statements in this book and the hard economic and technical data that backs them up are more than a minority opinion. It is a topic of growing interest at the World Economic Forum, where business and political heavyweights meet in Davos, Switzerland, to discuss how to stimulate new patterns of global economic growth. It is even the growing view of a group that call themselves “space ethicists.” Here is how Christopher J. Newman, at the University of Sunderland in the United Kingdom has put it: Space ethicists have offered the view that space exploration is not only desirable; it is a duty that we, as a species, must undertake in order to secure the survival of humanity over the longer term. Expanding both the resource base and, eventually, the habitats available for humanity means that any expenditure on space exploration, far from being viewed as frivolous, can legitimately be rationalized as an ethical investment choice. (Newman) On the other hand there are space ethicists and space exobiologists who argue that humans have created ecological ruin on the planet—and now space debris is starting to pollute space. Th ese countervailing thoughts by the “no growth” camp of space ethicists say we have no right to colonize other planets or to mine the Moon and asteroids—or at least no right to do so until we can prove we can sustain life here on Earth for the longer term. However, for most who are planning for the new space economy the opinion of space philosophers doesn’t really fl oat their boat. Legislators, bankers, and aspiring space entrepreneurs are far more interested in the views of the super-rich capitalists called the space billionaires. A number of these billionaires and space executives have already put some very serious money into enterprises intent on creating a new pathway to the stars. No less than five billionaires with established space ventures—Elon Musk, Paul Allen, Jeff Bezos, Sir Richard Branson, and Robert Bigelow—have invested millions if not billions of dollars into commercializing space. They are developing new technologies and establishing space enterprises that can bring the wealth of outer space down to Earth. This is not a pipe dream, but will increasingly be the economic reality of the 2020s. These wealthy space entrepreneurs see major new economic opportunities. To them space represents the last great frontier for enterprising pioneers. Th us they see an ever-expanding space frontier that offers opportunities in low-cost space transportation, satellite solar power satellites to produce clean energy 24h a day, space mining, space manufacturing and production, and eventually space habitats and colonies as a trajectory to a better human future. Some even more visionary thinkers envision the possibility of terraforming Mars, or creating new structures in space to protect our planet from cosmic hazards and even raising Earth’s orbit to escape the rising heat levels of the Sun in millennia to come. Some, of course, will say this is sci-fi hogwash. It can’t be done. We say that this is what people would have said in 1900 about airplanes, rocket ships, cell phones and nuclear devices. The skeptics laughed at Columbus and his plan to sail across the oceans to discover new worlds. When Thomas Jefferson bought the Louisiana Purchase from France or Seward bought Alaska, there were plenty of naysayers that said such investment in the unknown was an extravagant waste of money. A healthy skepticism is useful and can play a role in economic and business success. Before one dismisses the idea of an impending major new space economy and a new gold rush, it might useful to see what has already transpired in space development in just the past five decades. The world’s first geosynchronous communications satellite had a throughput capability of about 500 kb / s. In contrast, today’s state of the art Viasat 2 —a half century later— has an impressive throughput of some 140 Gb/s. Th is means that the relative throughput is nearly 300,000 greater, while its lifetime is some ten times longer (Figs. 1.1 and 1.2 ). Each new generation of communications satellite has had more power, better antenna systems, improved pointing and stabilization, and an extended lifetime. And the capabilities represented by remote sensing satellites , meteorological satellites , and navigation and timing satellites have also expanded their capabilities and performance in an impressive manner. When satellite applications first started, the market was measured in millions of dollars. Today commercial satellite services exceed a quarter of a billion dollars. Vital services such as the Internet, aircraft traffi c control and management, international banking, search and rescue and much, much more depend on application satellites. Th ose that would doubt the importance of satellites to the global economy might wish to view on You Tube the video “If Th ere Were a Day Without Satellites?” [ 2 ]. Let’s check in on what some of those very rich and smart guys think about the new space economy and its potential. (We are sorry to say that so far there are no female space billionaires, but surely this, too, will come someday soon.) Of course this twenty-fi rst century breakthrough that we call the New Space economy will not come just from new space commerce. It will also come from the amazing new technologies here on Earth. Vital new terrestrial technologies will accompany this cosmic journey into tomorrow. Information technology, robotics, artificial intelligence and commercial space travel systems have now set us on a course to allow us humans to harvest the amazing riches in the skies—new natural resources, new energy, and even totally new ways of looking at the purpose of human existence. If we pursue this course steadfastly, it can be the beginning of a New Space renaissance. But if we don’t seek to realize our ultimate destiny in space, Homo sapiens can end up in the dustbin of history—just like literally millions of already failed species. In each and every one of the five mass extinction events that have occurred over the last 1.5 billion years on Earth, some 50–80 % of all species have gone the way of the T. Rex, the woolly mammoth, and the Dodo bird along with extinct ferns, grasses and cacti. On the other hand, the best days of the human race could be just beginning. If we are smart about how we go about discovering and using these riches in the skies and applying the best of our new technologies, it could be the start of a new beginning for humanity. Konstantin Tsiokovsky, the Russian astronautics pioneer, who fi rst conceived of practical designs for spaceships, famously said: “A planet is the cradle of mankind, but one cannot live in a cradle forever.” Well before Tsiokovsky another genius, Leonardo da Vinci, said, quite poetically: “Once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been, and there you will always long to return.” The founder of the X-Prize and of Planetary Resources, Inc., Dr. Peter Diamandis, has much more brashly said much the same thing in quite diff erent words when he said: “The meek shall inherit the Earth. The rest of us will go to Mars.” The New Space Billionaires Peter Diamandis is not alone in his thinking. From the list of “visionaries” quoted earlier, Elon Musk, the founder of SpaceX; Sir Richard Branson, the founder of Virgin Galactic; and Paul Allen, the co-founder of Microsoft and the man who financed SpaceShipOne, the world’s first successful spaceplane have all said the future will include a vibrant new space economy. Th ey, and others, have said that we can, we should and we soon shall go into space and realize the bounty that it can offer to us. Th e New Space enterprise is today indeed being led by those so-called space billionaires , who have an exciting vision of the future. They and others in the commercial space economy believe that the exploitation of outer space may open up a new golden age of astral abundance. They see outer space as a new frontier that can be a great source of new materials, energy and various forms of new wealth that might even save us from excesses of the past. Th is gold rush in the skies represents a new beginning. We are not talking about expensive new space ventures funded by NASA or other space agencies in Europe, Japan, China or India. No, these eff orts which we and others call New Space are today being forged by imaginative and resourceful commercial entrepreneurs. Th ese twenty-fi rst century visionaries have the fortitude and zeal to look to the abundance above. New breakthroughs in technology and New Space enterprises may be able to create an “astral life raft” for humanity. Just as Columbus and the Vikings had the imaginative drive that led them to discover the riches of a new world, we now have a cadre of space billionaires that are now leading us into this New Space era of tomorrow. These bold leaders, such as Paul Allen and Sir Richard Branson, plus other space entrepreneurs including Jeff Bezos of Amazon and Blue Origin, and Robert Bigelow, Chairman of Budget Suites and Bigelow Aerospace, not only dream of their future in the space industry but also have billions of dollars in assets. These are the bright stars of an entirely new industry that are leading us into the age of New Space commerce. These space billionaires, each in their own way, are proponents of a new age of astral abundance. Each of them is launching new commercial space industries. They are literally transforming our vision of tomorrow. These new types of entrepreneurial aerospace companies—the New Space enterprises—give new hope and new promise of transforming our world as we know it today. The New Space Frontier What happens in space in the next few decades, plus corresponding new information technologies and advanced robotics, will change our world forever. These changes will redefi ne wealth, change our views of work and employment and upend almost everything we think we know about economics, wealth, jobs, and politics. Th ese changes are about truly disruptive technologies of the most fundamental kinds. If you thought the Internet, smart phones, and spandex were disruptive technologies, just hang on. You have not seen anything yet. In short, if you want to understand a transition more fundamental than the changes brought to the twentieth century world by computers, communications and the Internet, then read this book. There are truly riches in the skies. Near-Earth asteroids largely composed of platinum and rare earth metals have an incredible value. Helium-3 isotopes accessible in outer space could provide clean and abundant energy. There is far more water in outer space than is in our oceans. In the pages that follow we will explain the potential for a cosmic shift in our global economy, our ecology, and our commercial and legal systems. These can take place by the end of this century. And if these changes do not take place we will be in trouble. Our conventional petro-chemical energy systems will fail us economically and eventually blanket us with a hydrocarbon haze of smog that will threaten our health and our very survival. Our rare precious metals that we need for modern electronic appliances will skyrocket in price, and the struggle between “haves” and “have nots” will grow increasingly ugly. A lack of affordable and readily available water, natural resources, food, health care and medical supplies, plus systematic threats to urban security and systemic warfare are the alternatives to astral abundance. The choices between astral abundance and a downward spiral in global standards of living are stark. Within the next few decades these problems will be increasingly real. By then the world may almost be begging for new, out of- the-box thinking. International peace and security will be an indispensable prerequisite for exploitation of astral abundance, as will good government for all. No one nation can be rich and secure when everyone else is poor and insecure. In short, global space security and strategic space defense, mediated by global space agreements, are part of this new pathway to the future.

#### Resource scarcity coming now and causes extinction—asteroid mining is the only way to solve

Crombrugghe 18 – Guerric, Business Development Manager Brussels, Brussels Capital Region, “Asteroid mining as a necessary answer to mineral scarcity”, LinkedIn, 1/11/2018, <https://www.linkedin.com/pulse/asteroid-mining-necessary-answer-mineral-scarcity-de-crombrugghe>

We need minerals, and we always will. Yet, our reserves are finite and a 100% end-of-life recycling rate is impossible to achieve. Eventually, new entrants will therefore be required to sustain our system. While the business case for asteroid mining can obviously not be closed with current technologies, it will someday become a necessity. We may as well start preparing ourselves. Scarcity of resources, the challenge of the 21st century According to the World Bank, in 2016 humanity's growth rate was of 1.18% in terms of population, and 2.50% in terms of GDP. Both of these, in turn, drive our staggering resource consumption: there are more of us, and each of us needs more. On the other, the Earth is a closed system, and resources are only available in a finite amount. We all know by now that there is only this much oil & gas, but the same can actually be said for water, arable land, minerals, etc. These two simple observations have sparkled the debate around the scarcity of resources. Even with the best intentions, mathematics teaches us that it is impossible to indefinitely extract resources from a given finite supply [1]. The problem arising in the short-term is the exhaustion of the existing supply. That limit is actually coming in fast. In a paper published in 2007, Stephen Kessler demonstrates that the global mineral reserves are only sufficient for the next 50 years. The figure on the right shows the ratio of known global reserve to global annual consumption, given a rough indication of adequacy in years. It dates from an earlier paper, published in 1994. Since then, the development of environmental-friendly technologies (e.g. batteries, electric engines, etc.) has drastically increased the consumption rate of high-tech metals such as cobalt, platinum, rare earths, or titanium. On the other hand, exploration programs have allowed to discover new deposits, notably of gold and diamond. We will certainly be able to continue to increase - or at least sustain - our reserves, but only temporarily. Recycling and other temporary fixes An obvious solution is recycling, i.e. rejuvenating our stocks. A popular concept to illustrate this idea is that of urban mining: retrieving the ores present in smartphones and other electronic devices. It may prove to be not only more environmental-friendly, be also safer and more cost-effective. Nevertheless, every solution based on recycling is, again, nothing more than a temporary fix, buying us a finite amount of time. The United Nations Environment Programme studied in a report the current recycling rate of 60 metals. More than half of them have an end-of-life recycling rate below 1%, and less than one-third are above 50%. Nickel, for example, is relatively easy to retrieve, with and end-of-life recycling rate of up to 63% under the best conditions. At that rate, less than 1% of the initial stock is available after only 10 cycle. Even with a staggering 99% efficiency, the same 1% limit is achieved in less than 460 cycles. Not bad, of course, but still not enough. Should our hunger for resources continue, and even with the most optimised recycling techniques, a second problem will arise in the longer term: the amount of resources needed at a given time will simply exceed the total available stock. Unless we manage to find growth vectors that do not require raw materials, that tipping point is an impassable limit. Its proximity obviously depends on our consumption rate. Asteroid mining? No matter which way we look at it, we will thus be short on resources, either through sheer exhaustion (i.e. transformation in an unrecoverable form) or because the demand will exceed the total reserves. We can - and should - talk about recycling, dematerialisation, and other more ethically questionable solutions such as bio-engineering. Nonetheless, no matter how good they are, these are only temporary fixes. If we don't radically change our lifestyle, we will sooner or later have to address the elephant in the room: the Earth is a closed system, we need new entrants. How can space help? Short answer: all these minerals can be found in space. Some are difficult to obtain, others are even more difficult, none are straightforward. The most accessible destination is near-Earth asteroids, a reservoir of over 17,000 known - and counting - giant rocks that regularly cross the orbit of our planet. They are commonly classified in three main families. The most interesting one, for our case, is that of the S-type asteroids. These are metallic bodies, containing first and foremost nickel, iron and cobalt, but also gold, ores from the platinum group. But the list doesn't stop there, many other minerals can be found in smaller amounts: iridium, silver, osmium, palladium, rhenium, rhodium, ruthenium, manganese, molybdenum, aluminium, titanium, etc. How do we get there? Let's take an example: Ryugu, formerly known as 1999 JU3. It's a C-type asteroid measured to be approximately one kilometre in size [2]. In addition to nickel, iron and cobalt, it also contains a fair share of water, nitrogen, hydrogen, and ammonia. Its total value is estimated to be approximately 80 billion USD. Fantastic! But how do we get there and, most importantly, how much does it cost? Well, we may have the start of an answer to these questions. Reaching Ryugu is a technological challenge, but it is feasible. In December 2014, the Japanese space agency has launched a spacecraft, Hayabusa2, heading to the asteroid. Its mission includes the collection of a small sample which will be sent back to the Earth, with a landing planned for December 2020. The target for the sample size is at least 100 µg. The total cost of the mission was projected to be around 200 million USD. That's 2 trillion USD per gram. Let's be optimistic and assume that the sample retrieved is pure gold. At today's rate, it is worth 42.5 USD per gram. That's a difference of over 10 orders of magnitude. Some may argue that Hayabusa2 has many other objectives that retrieving a sample. The mission does indeed include multiple landers, thorough scientific investigations, etc. There is actually another asteroid sample return mission underway, which we could you as a second point of comparison: OSIRIS-Rex, from NASA. It's heading for Bennu, also a C-type asteroid, which it will reach in August 2018. Total cost of the mission: 980 million USD. Target sample size: at least 60 g. We achieve thus roughly speaking 16 million USD per gram. Better, but still 6 orders of magnitude off compared to pure gold. It's pretty much as good as it gets with existing state-of-the-art technologies. Not much of a business case. Should we forget about it? Referring back to our earlier conclusion on resource scarcity, we had two options. Either we drastically reduce our resource consumption, to such a degree that reserves can last for longer than humanity itself, or we extend our closed system, the Earth, to nearby asteroids. In the current state of affairs, I am honestly not sure which course of action is the easiest. As they get increasingly rare, the cost of minerals will go up. On the other hand, as explained in a previous article, we can expect the cost of space activities to go steadily down. Step by step, these 6 orders of magnitude will slowly get munched away from both ends, until eventually asteroid mining becomes a viable operation. In other words: it will only become financially interesting once minerals become a thousand times more expensive and space activities a thousand times cheaper. As a point of reference, the introduction of reusable rockets by SpaceX, widely considered as one of the few truly disruptive changes in the aerospace sector in the last few decades, has "only" brought a cost reduction of 30%. While it's clearly amazing, we still need at least 220 innovations of the same calibre [3] before we can make it work (again: assuming the price of minerals simultaneously goes up by a factor of a thousand). It's therefore quite likely that space mining will not take place within our lifetime [4]. How can we accelerate the process? Firstly, we can only celebrate and support the numerous private initiatives which contribute to make that reality happen, either indirectly (e.g. launchers, space systems, etc.) or directly (e.g. in-space manufacturing, lunar exploration, etc.). Shout out to all the folks who manage to keep the flame of space exploration burning while generating profit for their investors. Secondly, space agencies and other institutional actors should continue to act as promoters of pioneering mission such as Hayabusa2, OSIRIS-REx, or DART. We can only regret that the Asteroid Redirect Mission from NASA and the Asteroid Impact Mission from ESA were not funded. From my perspective, these should actually be amongst the top priorities of our space exploration agenda. Not only are they instrumental to our understanding of the solar system, but they are also essential if we want to avoid the same fate as the dinosaurs. It's a question of survival. As a bonus, they also pave the way towards cost-efficient asteroid mining. In the meantime, we might want to consume existing resources a bit more efficiently.

#### Also solves warming – a] Key to REM’s that spur Renewables and b] Reduces Terrestrial Mining that wrecks the environment.

MacWhorter 15, Kevin. "Sustainable mining: Incentivizing asteroid mining in the name of environmentalism." Wm. & Mary Envtl. L. & Pol'y Rev. 40 (2015): 645. (J.D. Candidate, William & Mary Law School)//Elmer

A. Rare Element Mining on Earth In the next sixty years, scientists predict that certain elements crucial to modern industry such as platinum, zinc, copper, phosphorous, lead, gold, and indium could be exhausted on Earth. 12 Many of these have no synthetic alternative, unlike chemical elements such as oil or diamonds.13 Liquid-crystal display (LCD) televisions, cellphones, and laptops are among the various consumer technologies that use precious metals.14Further, green technologies including wind turbines, solar panels, and catalytic converters require these rare elements. 15 As demand rises for both types of technologies, and as reserves of rare metals fall, prices skyrocket.16 Demand for nonrenewable resources creates conflict, and consumerism in rich countries results in harsh labor treatment for poorer countries.17 In general, the mining industry is extremely destructive to Earth’s environment.18 In fact, depending on the method employed, mining can destroy entire ecosystems by polluting water sources and contributing to deforestation.19 It is by its nature an unsustainable practice, because it involves the extraction of a finite and non-renewable resource.20 Moreover, by extracting tiny amounts of metals from relatively large quantities of ore, the mining industry contributes the largest portion of solid wastes in the world.21 The Environmental Protection Agency (EPA) describes the industry as the source of more toxic and hazardous waste than any other industrial sector [in the United States], costing billions of dollars to address the public health and environmental threats to communities. 22 Poor regulations and oxymoronic corporate definitions of sustainability, however, make it unclear as to just how much waste the industry actually produces.23 Platinum provides an excellent case study of the issue, because it is an extremely rare and expensive metal—an ore expected to exist in vast quantities in asteroids.24 Further, production of platinum has increased sharply in the past sixty years in order to keep up with growing demand for use in new technologies.25 In fact, despite their high costs, platinum group metals are so useful that [one] of [four] industrial goods on Earth require them in production. **26** Scholars do not expect demand to slow any time soon.27 Among other technologies, industries use platinum in products such as catalytic converters, jewelry production, various catalysts for chemical processing, and hydrogen fuel cells.28 While there is no consensus on how far the Earth’s reserves of platinum will take humanity, many scientists agree that platinum ore reserves will deplete in a relatively short amount of time.29 With the rate of mining at an all-time high,30 it is increasingly clear that historical patterns of mineral resources and development cannot simply be assumed to continue unaltered into the future. 31 The platinum mining industry, however, has a strong incentive to increase its rate of extraction as profits grow with the rate of demand. Without any alternative, this destructive practice will continue into the future.32 So-called platinum-group metal (PGM) ores are mined through underground or open cut techniques.33 Due to these practices, all but a very small fraction of the mined platinum ore is disposed of as solid waste.34 The environmental consequences of platinum production are thus quite significant, but like the mining industry in general, the amount of waste is typically under-reported.35 While this is due to high production levels at the moment, those levels will only increase given the estimated future demand of platinum.36 In spite of the negative consequences, mining continues unabated because it is economically important to many areas.37 The future environmental costs provide a major challenge in creating a sustainable system. Relegating at least some mining companies to near-Earth asteroids would reduce the negative effects of future mining levels on Earth. The economic benefits of mining need not be sacrificed for the sake of the environment.38

## Case

### 1NC – Framing

#### 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.

#### [b] Gateway issue - we need to be alive to assign value and debate competing moral theories- extinction literally ends the debate on “ought” [c] moral theories were formulated prior to the Anthropocene and human capacity for collective death so they cannot be relied on in situations of existential risk [d] no coherent moral theory can allow for extinction because it means the end of value

#### War worsens structural inequalities – a] takes away valuable resources to combat issues like economic and social injustice b] war falls the hardest on those who can’t protect themselves – especially nuclear war c] those who fight war are more likely to be worse off socially – aff ballot actively consigns the oppressed to fight for the state d] war kills everyone – death means we literally cannot fight injustice e] biological life outweighs value to life – value to life is a sliding scale whereas biological death is the end of any possible future value f] value to life is paternalistic since it says people have no value in life and might as well die

### 1NC – Overview

#### The role of the ballot is to determine if the aff is a good idea – anything else is self-serving and arbitrary.

#### The aff must be a departure from the status quo. If not, you should vote neg on presumption. Double bind-

#### A. Either they are NOT a change from the status quo and therefore not inherent, or

#### B. they ARE a departure from the status quo, but the aff is TOO SMALL to solve the impacts of the 1AC.

#### Imagination doesn’t solve anything – what does their imagination do? It’s a bad type of advocacy since they don’t have to defend anything concrete to solve their impacts since they can just imagine out of an entire system. Means no solvency and vote neg on presumption.

#### Space not key to capitalism – they have one card about space in their entire aff, which says capitalist entities are going into space, but not that the only way capitalism can survive is through appropriation of space – meaning even if they can solve one instance of capitalism, they can’t prevent it broadly

#### Acceleration double bind – either accelerating capitalism is good or the aff removes appropriation, which is an aspect of capitalism – can’t do both meaning they don’t solve

### AT: Communication/Acceleration

#### The word “acceleration” only shows up in the tags they wrote and in unhighlighted parts of one card – means they don’t get offense from it. They link too – their entire aff is premised on communicating to the judge. The reading of the 1AC does not seize back the means of communication – they haven’t done anything unique and there’s no reason why we don’t do it too.

#### Their information meaningless arg is wrong and information is not consumed uniformly by a mass society---it’s diffused, meaning individuals and social groups can accurately process and employ the information they consume for pragmatic political reforms. **Turner 04**

Bryan S. Turner, Dean of Social Sciences at Deakin University, Australia, “Baudrillard for Sociologists,” in Forget Baudrillard?, 2004 edition, p. 80-83

While, as far as one can tell, Baudrillard was not influenced by Bell’s vision of the role of technology and the media in shaping postindustrialism, he was influenced by Marshall McLuhan’s analysis (Gane 1991b:48) of the impact of new media on the transformation of modern culture, especially in The Gutenberg Galaxy (McLuhan 1967). McLuhan was particularly sensitive to the idea that we live in a processed social world where human beings live in a complete technostructure. This technological environment is carried with us as extensions of our own bodies, but McLuhan did not adopt a pessimistic view of the age of anxiety, because his ‘technological humanism’ (Kroker et al. 1984) and Catholic values committed him to the idea of the immanence of reason and the hope of an escape from the labyrinth. Indeed, a global technological system could become the basis of a universalistic culture. Although he was fully aware of the sensory deprivation which he associated with the impact of the mass media, he none the less remained committed to the hope that these negative effects were not fatal. Baudrillard, who as we have noted was deeply influenced by McLuhan’s idea that the content of messages was relatively unimportant in relation to their form, has embraced a very nihilistic position with respect to our processed environment. Baudrillard’s pessimistic view of the fissure in the historical development of the modern is based on his view of the masses. Baudrillard’s analysis of the masses is a product of the Situationist responses to the May events of 1968, when it became increasingly obvious that the critical social movements of modern society would not be dominated by Marxist theory or directed by a vanguard of the working class. The crisis of May 1968 had not been predicted by Marxism or by mainstream sociology, but they did validate the claims of Situationists like Guy Debord in the journal Internationale Situationiste. However, if the crisis had been unanticipated by conventional political analysis, then the sudden collapse of the students’ and workers’ movements of 1968 found no easy explanation in the framework of mainstream social sciences. Baudrillard’s concept of the inexplicable nature of the mass depend a great deal on the unusual circumstances surrounding the May events. By 1973 with the publication of The Mirror of Production (Baudrillard 1975), Baudrillard was already moving away from an orthodox Marxist view of production, arguing that Marxism, far from being an external critique of capitalism, was merely a reflection or mirror of the principal economistic values of capitalism. Instead of engaging in the production of meaning, a subversive, oppositional movement would have to challenge the system from the point of view of meaninglessness. Subversion would have to rob the social system of significance. In taking this stand, Baudrillard followed the Situationist claim that whatever can be represented can be controlled (Plant 1992:137). The mass events of 1968 offered a promise of the nonrepresentational moment, the pure event of authenticity, which could not be explained, and therefore could not be manipulated. Baudrillard, in dismissing Marxist theory as a means of representing events, sought to replace the idea of a mode of production with a mode of disappearance. In taking this attitude towards modern social movements, Baudrillard’s argument also rests on the various meanings of the word ‘mass’. Baudrillard is thus able to make allusions to the idea of physical substance, matter, the majority and the electrical meaning of earth. The translator’s note to In the Shadow of the Silent Majority points out that faire masse can mean to form a majority and to form an earth. Baudrillard argues by allusion that the mass absorbs the electrical charges of social and political movements; the mass thus neutralizes the electrical charge of society. This use of allusion, parody and irony is typical of Baudrillard’s mode of analysis, which is a type of sociological poetics, a style which is likely to make sociologists feel uncomfortable (Gane 199la:193). There is here also a continuity with the style of Dada and the Situationists. The poetic and striking character of Baudrillard’s style has no counterpart in professional social science, least of all in the British context. Baudrillard’s ‘sociological fictions’ (1990a:15) are striking and challenging, but they are not ultimately convincing. Arguments which depend on allusion, allegory and similar rhetorical devices are decorative but they are not necessarily powerful. The notion of ‘mass society’ already has a clearly worked out sociological critique. The idea of ‘mass society’ might have been relevant in describing the new markets which were created in the post-war period with the advent of innovative technologies, which had the immediate effect of lowering prices and making commodities available to a mass audience. However, the trend of sociological analysis in the last two decades has been to assert that mass audiences have been broken down into more selectively constructed niches for more individualized products. It is controversial to argue that industrialization necessarily produces a mass society, characterized by a common culture, uniform sentiments or an integrated outlook. The idea of a mass society was often associated with the notion that the decline of individualism would produce a directionless mass as the modern equivalent of the eighteenthcentury mob. Critical theorists like Adorno and Marcuse associated the massification of society with authoritarianism and a potential for fascism. Of course, Baudrillard’s version of mass society is based on a particular view of the mass media creating a hyperreality in which the real has been absorbed by the hyperreal; meaning has imploded on itself. Although Baudrillard’s analysis of hyperreality is postcritical (Chen 1987), he does adopt in practice a critical position towards American civilization, which is the extreme example of massification. Rather like critical theorists, Baudrillard believes that the (bourgeois) individual has been sucked into the negative electrical mass of the media age. However, sociological research on mass audiences shows that there is no ground for believing that media messages are received, consumed or used in any standardized manner, and the majority of social scientists working on culture have attempted to argue that cultural objects in the age of the mass media are appropriated, transformed and consumed in diverse forms and according to various practices (de Certeau 1984). In fact, sociologists, largely inspired by the Situationists, have argued that everyday life is resistant to massification and that the concrete reality of everyday life-situations is the principal arena within which opposition to massification can be expected. Everyday life was regarded by both Guy Debord and Henri Lefebvre (1991) as the foundation of authenticity. Baudrillard, by arguing that criticism belongs to the period of modernism and not to the age of hyperreality, has ruled out opposition to the system, at least at the level of public debate and formal politics.

### AT: Beller

#### The world as a supercomputer is an unhelpful and dangerous analytic. The norm of sovereignty as territorial influences IR.

Alexander B. Murphy 10, Professor in the department of geography and Rippey Chair in Liberal Arts & Sciences at the University of Oregon, “Intersecting Geographies of Institutions and Sovereignty,” International Studies, March 10, https://oxfordre.com/internationalstudies/abstract/10.1093/acrefore/9780190846626.001.0001/acrefore-9780190846626-e-409/version/0

The checkered history of sovereignty has prompted a number of commentators to suggest that it is useful to distinguish between de jure and de facto sovereignty within the modern state system (e.g. Murphy 1996; Austin and Kumar 1998). As traditionally deployed, de jure sovereignty refers to a legal principle giving state governments final authority within their territorial domains, but requiring them to respect the territorial integrity of other domains. De facto sovereignty refers to the actual ability of state governments to exercise final authority within their territorial domains, along with the existence of a system in which states do, in fact, respect the territorial integrity of other states. Viewed in these terms, it is clear that there has always been a gap between de jure and de facto sovereignty – and that the gap has fluctuated over time. Both were fairly strong in Central Europe in the decades following the signing of the Peace of Westphalia, and both were eroding rapidly by the middle of the eighteenth century. During the subsequent two hundred years, the spatial reach of de jure sovereignty widened with the expansion of the modern state system – eventually making sovereignty a bedrock principle of international law. De facto sovereignty, by contrast, ebbed and flowed with the times – often strengthening for a time after major international agreements affirmed sovereignty’s de jure significance, but then eroding in the face of real-world power differentials and changing political, economic, and technological circumstances. Until relatively recently the dissonance between de jure and de facto sovereignty could be rationalized as a product of an inevitable gap between institutionalized norms and concrete practices. (The fact that many people cheat on their taxes does not render tax law a fiction or make taxation an insignificant element in the exercise of power.) Thus even when the Cold War was in full swing and the United States and the Soviet Union were involved in the internal affairs of many states around the globe, sovereignty as a de jure principle was not seriously questioned. As already noted, this view was reinforced by a conceptually dominant modernization thesis, which treated the state as the final step in the evolution of the modern political order. Yet the tendency to take sovereignty for granted began to change as increasingly well-recognized foci of power outside the framework of the territorial state emerged, for these represented a different type of challenge to the sovereignty principle. They called into question not just the gap between de facto and de jure sovereignty, but whether the legitimate exercise of power could be seen in terms of the Westphalian, territorialized conception of sovereignty. Scholars grappling with this latter matter adopted two different, although not necessarily clashing, approaches to sovereignty’s changing character. One approach sought to document the ways in which territorial sovereignty was being eroded by extrastate sources of power without necessarily arguing that the Westphalian sovereign system was completely dead. The goal instead was to point to the functional changes occurring in the system. The other approach took the position that it is no longer useful to see sovereignty in Westphalian territorial terms because the legitimate exercise of power is no longer fundamentally rooted in a set of discrete territorial units. Turning to the first of these approaches, growing evidence of economic and cultural globalization provided the spark for a set of commentaries dating back to the 1970s, if not earlier, that began to call into question the power of the state to control fundamental aspects of the global political economy. Much of the attention was focused on multinational corporations and financial practices and institutions that were beyond the effective reach of individual states. Contemporaneously, the growing visibility of substate nationalist groups challenging state authority began to attract the attention of scholars. Few of these early forays into the changing territorial power of the state made any significant reference to sovereignty, but they set the stage for a series of studies in the 1990s focused explicitly on territorial sovereignty’s weakening significance (see generally Flint 2002). These studies directed attention to such matters as the impacts of transportation and communications technologies on the geographical organization of power, the ways in which expanding flows of goods and people were undercutting traditional state prerogatives, the impacts of sub- and trans-state identity communities on the role of the state as the arbiter of citizenship, and the deterritorialization of traditional government practices. Examples of studies on each of these topics provide insight into the ways in which the shifting human geography of the planet brought the Westphalian sovereignty construct into question. In the transportation and communications arena, Stanley Brunn (1998) looked at how the internet was weakening sovereignty arrangements both by facilitating extrastate forms of political and economic practice and by making it more difficult for the state to control communication. He contended that the internet, along with a variety of other innovations in communications and transportation, shapes how states “view themselves in the world, how they address their own and others’ problems and issues, and the form and frequencies of information exchanges” (1998:107). This set the stage for more recent scholarly work on the disjunction between state territoriality and the institutionalization of policy initiatives and spatial representations in an era of rapid technological change (e.g. O’Lear 1999; Steinberg 2001). John Agnew (1999) focused attention on the ways in which population migration and monetary flows are undermining the traditional role of the state. He documented a series of developments that, he argued, are fundamentally altering the geography of power. In his words, “political power now circulates in ways that are not best captured by the theoretical equation of fixed state territoriality, pre-given political identities, and limited movement of goods, investment, and people” (1999:521). As such, he contended that conventional theories in International Relations, which are grounded in a set of assumptions rooted in the Westphalian state system, need to be rethought. Turning to matters of identity, edited compilations assembled by Knippenburg and Markusse (1999) and Herb and Kaplan (1999) highlighted the growing significance of identity communities emerging above and below the scale of the state (e.g. substate nationalist groups, cross-border communities, and supranational groupings). A fundamental (sometimes implicit) premise of many studies in these volumes is that states no longer play as dominant a role in identity formation as they once did – thus undermining the strength of the nation–state link that historically helped to deepen sovereignty’s reach. This theme has been taken up by anthropologists as well as geographers, with Ong (2006:7), for example, contending that neoliberalism is reconfiguring the geography of citizenship in ways that “fragment and extend the space of the state.” Studies of the shifting nature of borders also drew attention to the strengthening of extrastate identity communities. Indeed, Newman and Paasi (1998) and Paasi (1998) argued that borders were among the places where sovereignty and collective identity were being most dramatically renegotiated. Timothy Luke’s (1991) influential study of the Kuwait government during the 1991 Gulf War highlighted the potential decoupling of traditional government practices from state territoriality, as traditionally understood. Luke argued that, before the Gulf War, the practice of statehood in Kuwait was already significantly deterritorialized because governance fundamentally relied on foreign bank accounts, extrastate real estate and stock holdings, and a set of globalized economic flows. This meant that, after the Iraqi invasion, the Kuwaiti government could continue to function as a state even though it lacked a territorial base and was forced to coordinate its operations from Washington, DC, and Taif, Saudi Arabia. Luke’s assessment cast Westphalian territorial sovereignty almost as an anachronism in a world of networks and flows. In recent years a number of studies have built on the foregoing assessments of the functional challenges to sovereignty, providing an increasingly rich picture of the situation of the state in relation to nodes and flows existing at different scales. In terms of how the geography-sovereignty-institution nexus is conceptualized, however, the most significant recent development is arguably the contention that sovereignty and territory have become essentially “unbundled” (Raustiala 2005). In the geographical literature this idea finds early support in an article by Austin and Kumar (1998:58), which seeks to redefine sovereignty as reflective of “the degree to which a state, other institution, or organization can coerce or otherwise intentionally (and significantly) influence the behavior of other participants in the world political system and have such behavior recognized and accepted by a significant number of participants in that world political system.” But it finds fullest expression in John Agnew’s (2005) piece, which argues for a focus on effective sovereignty because a de jure territorial sovereignty system has never really been created. The roots of the call to unbundle territory and sovereignty lie in the functional challenges to the role of the state outlined above. Those challenges were behind David Elkins’s (1995) effort to outline what a world would look like that was Beyond Sovereignty. This is not the project of Austin and Kumar (1998) or Agnew (2005), however. They proceed from the premise that there are still norms governing the legitimate exercise of power that need to be recognized – norms that are invoked by the concept of sovereignty – but that those norms are now so divorced from the Westphalian political-territorial order that it makes no sense to continue to frame sovereignty exclusively in Westphalian territorial terms. Agnew (2005), in particular, argues that we should abandon the concept of de jure sovereignty as traditionally deployed, for that concept is rooted in a Westphalian political-territorial ideal that never functioned as such – and is certainly not doing so now. Instead, he proposes that we look at how the legitimate exercise of power is actually constructed geographically and functionally. In support of his call for a focus on effective sovereignty, Agnew looks at contemporary currency regimes and suggests that four types of sovereignty arrangements govern those regimes (2005:445–56): • A classic sovereignty regime that combines consolidated territoriality and strong central state authority. China, controlling its currency rates within its borders, embodies this regime. • An integrative sovereignty regime that combines consolidated territoriality with weaker central state control. The EU, consolidating currency control internally, exemplifies this regime. • A globalist sovereignty regime that combines open territoriality with strong central state control. The US, which undersigns the bulk of the international financial network, embodies this regime. • An imperialist sovereignty regime that combines open territoriality and weaker central state authority. South America, where some national currencies have been replaced by US dollars, typifies this regime. Each of these regimes incorporates some form of territoriality, ranging from strongly consolidated to relatively open, so they do not necessarily represent a complete decoupling of sovereignty and territory. Although the impetus for the call to sever sovereignty from its Westphalian territorial roots came in part from accumulated evidence of the significance of loci of power beyond the territorial state, the US invasion of Iraq in 2003 and the creation of a space of “exceptional sovereignty” at Guantánamo Bay (Reid-Henry 2007) were of particular significance. For many commentators, the doctrine of preemptive war that was invoked by the United States to justify its invasion of Iraq exposed Westphalian sovereignty as a chimera (Elden 2009). And the legal claims that were advanced to justify the existence of the US prison at Guantánamo Bay – and the practices that took place there – demonstrated a “complicity of law and force” that may further undermine the political-territorial foundations of modernism that find expression in the sovereign state system (Reid 2005:241). In the end, Agnew (2005:456) argues, “we cannot meaningfully apply the orthodox conception of sovereignty to the conditional exercise of relative, limited, and partial powers that local, regional, national, international, and nonterritorial communities and actors now exert.” Following this logic, the best way forward is to abandon a concern with whether sovereignty is eroding, as the concept has never had sufficient fixity to justify investigations of its growing demise. Instead, what is needed is an exploration of different kinds of institutionalized structures of power, for these hold the clues as to how sovereignty actually works in the contemporary world. The Continuing Impacts of Westphalian Sovereignty Almost no one has argued that sovereignty has been unaffected by new technologies and changing economic and political arrangements, but a significant body of recent scholarship takes the position that Westphalian political-territorial practices and norms continue to have considerable influence, and therefore should not be overlooked. Studies in this vein generally focus on the tangible and normative impacts of traditional conceptions of sovereignty. In so doing, they reject, at least implicitly, the idea that de jure sovereignty is unworthy of scrutiny. Legal scholar Abdelhamid El Ouali (2006:630) summarizes the main argument underlying this stream of literature, contending that “sovereignty has ignited the ambitions of scores of societies.” He sees this as a reflection of the institutionalization in modern international law of conceptions and practices of territoriality that have made the maintenance of “territorial integrity” a fundamental goal of societies around the world. El Ouali’s contention is supported by a variety of studies focused on territorial sovereignty’s continuing ideological significance. Those studies treat sovereignty as a powerful norm and discourse that frames and structures myriad political and social initiatives. The degree of flexibility to that discourse is a matter of some debate (see Kuus 2002), but since that flexibility has limits, the Westphalian sovereignty norm arguably remains a force worth recognizing and investigating. Much of the literature in keeping with this perspective is case-study-specific, showing how particular developments are influenced by traditional sovereignty norms. A number of studies focus attention on the role played by the Westphalian territorial ideal in the agendas of particular political movements. Kolossov and O’Loughlin (1999), for example, look at the attempt to form “pseudo-states” on the periphery of the former Soviet Union, showing that the sovereign territorial ideal provides an impetus for creating the de facto sovereignty that characterizes entities such as the Transdniester Moldovan Republic (TMR). Since attempts to create new states can destabilize a de jure sovereignty regime, these initiatives might be seen as corrosive of the Westphalian political-territorial order. Yet unlike other corrosive forces (economic globalization, international human rights regimes, etc.), the emergence of new territorial states does not necessarily challenge the logic of the system itself, since leaders of independence movements are typically seeking not to change the structure of the system, but to carve out a niche within it. A different kind of example of the ongoing power of Westphalian sovereignty principles comes from a study by Berg (2006) of territorial conflicts in both Cyprus and Moldova. Berg looks at efforts to create federalization arrangements in these two divided states. Such arrangements would give the Turkish Republic of North Cyprus (TRNC) and the TMR a high degree of autonomy within Cyprus and Moldova, respectively, while keeping the states together. In both cases, however, such arrangements have been rejected by dominant interests in the capital cities. The explanation, according to Berg, lies in their unwillingness to embrace political-territorial structures that would significantly compromise the extension of governmental authority within state boundaries, as defined by the Westphalian territorial ideal. As Berg (2006:234) explains: With the implementation of the federal structure, the central governments of Cyprus and Moldova would have to grant legal status to and reduce their future control over the federal entities of TRNC and TMR. Although Nicosia and Chisinau presently do not have any control over the separated territories, they are not willing to settle for an agreement granting legal status to TMR and TRNC with a risk of not having full control perpetuating their separateness and prefer to keep the unrealistic option of full control of the total territory open. In other words, those in power in Cyprus and Moldova would rather accept a de facto arrangement in which they have no power over parts of their countries than less-than-full sovereignty in a portion of their territories. There are numerous other studies documenting the ways in which an ideological commitment to Westphalian sovereignty principles shapes political outcomes. Such commitments have worked against the construction of joint sovereignty arrangements in places such as Jerusalem and Northern Ireland (Sucharov 1998; Anderson 2008), they have made it all but impossible for India and Pakistan to contemplate any kind of partitioning of Jammu and Kashmir (Murphy 1990), and they have influenced the types of solutions that are even contemplated in places that have disintegrated into civil war (e.g. Bosnia; see Jeffrey 2008). Indeed, Jeffrey (2008:441) argues that dominant framings of Bosnia “do not challenge the primacy of the state, despite the prevalence of references to forms of cosmopolitan solidarity beyond the nation-state.” Instead, they serve to “promote the state as the primary territorialisation of political life” (2008:429). Another example of the power of the Westphalian territorial ideal comes from Glenn Petersen (1998), who studied the efforts of Micronesians to assert sovereign control over their homeland. While recognizing the contested nature of sovereignty as an international legal principle, Petersen shows that Micronesians view the doctrine as a “resource to be cultivated and exploited” (1998:179). Sovereignty, following Petersen, provides Micronesians with “a means of remaining true to their own traditional values, to free themselves from some of the risks their colonial status has exposed them to, and to enhance their ability to negotiate their future situation” (1998:202). Arguments about the ongoing significance of traditional sovereignty notions even arise in the context of analyses of developments that explicitly challenge sovereign territorial norms. Stuart Elden (2007), for example, contends that even as sovereignty is being undermined in the “War on Terror,” important parts of it are preserved – especially the principle mandating deference to existing boundaries. Even Luke’s (1991) study of the Kuwait government in exile (discussed above) acknowledges that the existence of a concrete territorial base was symbolically necessary for the government in exile to function. Of course Luke’s principal purpose was to highlight a case that showed the declining importance of territory for statehood in the contemporary era, but Murphy (1994) has argued that the larger set of events surrounding the Kuwait affair show the enduring significance of Westphalian territorial norms. He bases this assertion on the fact that, even though the United States’ willingness to become involved in the situation was widely seen to be a product (at least in part) of its own geopolitical and geoeconomic interests, the US was able to assemble an unprecedented international coalition of states in support of its move to remove Saddam Hussein’s army from Kuwait by force. What allowed this to happen was the clear, unambiguous challenge to de jure territorial sovereignty that occurred when Iraq’s armies marched into Kuwait and “temporarily obliterated from the map a recognized state” (1994:216). Without that provocation, it is almost unimaginable that the United States could have rallied the international community in the way that it did. The European Union (EU) represents perhaps the most explicit political-territorial challenge to the Westphalian state system because it disrupts the notion of a world politically constituted at a single scale: that of the state. Yet a number of commentators have argued that even in this case territorial assumptions rooted in traditional conceptions of sovereignty have shaped how the EU is conceptualized and what it has done. Ruggie (1993) contends that scholars and policy makers are so deeply mired in notions of territoriality associated with the modern state system that they lack even a vocabulary for describing what the EU might be. Moisio (2006) shows how conceptions of sovereignty frame debates over EU membership. And Murphy (1996; 2008) highlights the ways in which the political geographic imagination about the EU is caught up in an often unacknowledged, Westphalian-rooted idea that casts the success of the European integration project against the backdrop of the EU’s “state-building” capacity; those developments that make the EU look more state-like are generally treated as signs that integration is proceeding well, whereas those that challenge the concentration of power in Brussels are typically seen as signifying the opposite. The problem of viewing the EU in this way is that it focuses attention on governmental institutions as opposed to underlying social, political, and cultural processes. Moreover, it presents European integration fundamentally as a movement aimed at merging the interests of several states into one superstate rather than as a potential challenge to the concept of the territorial state itself. These conceptual predispositions are expressed concretely in some of the EU’s principal recent policy priorities: monetary Europe, the crafting of a constitution, the enhancement of executive power, and the expansion of EU competence in the foreign policy arena. While some of these initiatives have been successful, they have also contributed to the EU’s recent difficulties – rooted as they are in growing reservations about the further concentration of powers in a centralized bureaucracy. None of this means that the EU does not represent a challenge to the Westphalian political-territorial system. Those living in the EU are currently facing environmental degradation, uneven development, ethnic conflict, and other difficult problems. Each of these has a particular spatial character that bears little resemblance to the pattern of states, and the EU offers a potential framework for developing a less fragmented, more coherent, approach to confronting them. That potential is being realized to some extent through programs that foster transboundary cooperation, planning initiatives that are not organized on a state-by-state basis, and environmental research programs that collect and analyze data without concern for interstate boundaries. But these are up against larger, classic state-building initiatives – leading many in Europe to view the EU as a direct challenge to nationalist political-territorial aspirations rather than as a supplementary, or even complementary, force. This last point is arguably of particular significance because the continuing vitality of nationalism may well represent the single greatest ongoing impact of traditional sovereignty principles. This is because nationalism is at least partially a product of the Westphalian territorial ideal, meaning that some notion of territorial self-governance is at the heart of the concept itself (White 2000). The bond between sovereign territorial norms and nationalism is evident in the very definitions that are used to define terms such as nation, which reference both the territorial dimensions of nationhood and the ideological commitment of nations to self-government. Konstantin Symmons-Symonolewicz (1985:221), for example, defines a nation as “a territorially based community of human beings sharing a distinct variant of modern culture, bound together by a strong sentiment of unity and solidarity, marked by a clear historically-rooted consciousness of national identity, and possessing, or striving to possess a genuine self-government” (emphasis added). Moreover, nationalism itself is generally understood to be associated with the quest for “nation-state” status, with all that implies in terms of the de jure territorial norms of the modern state system. Of course, nationalism has been challenged in places by the rise of transnational cosmopolitan communities. Indeed, transnationalism has been a particular focus of study among those interested in examining the changing dynamics of state–society relations (e.g. Sassen 1999; Mountz 2003). Since the majority of the human population does not participate in those communities, however, traditional nationalist sentiment remains a fundamental force in the world today. The struggle over Iran’s nuclear program is rooted in a deeply held notion of the “Iranian nation’s” right to make its own decisions in its own territory. Russia’s efforts to assert its authority in the Arctic reflect a national sense of prerogative in a region being transformed by climate change. China’s outrage at external agitation over its policies in Tibet is rooted in a historically based sense of territory that casts Tibet as part of China’s sovereign territorial space. Ecuador and Peru’s long-standing boundary dispute is framed by nationalist territorial sensibilities. Even in supposedly postnationalist Europe, Irish votes against integration treaties and French protests over EU agricultural regulations show the continuing significance of a territorially grounded nationalism. All of these examples, and many more, support Daniel Philpott’s (2001) contention that de jure sovereignty should remain an object of analysis, if only for its power as an idea – albeit one with an institutional/legal grounding. Indeed, Philpott, following Hall (1999), argues for a research agenda focused on the normative impacts of traditional sovereignty principles. Such an agenda would include investigations of the ways in which “sovereignty constitutes authority,” the impacts of sovereignty norms on individual state decisions, and the normative status of the sovereignty principle itself (Philpott 2001:321–3). The goal of such an agenda is to move studies away from a focus on compliance with traditional sovereignty principles, which, he argues, ignores “a much deeper way in which the norms exercise influence – by constituting the very polities that enjoy sovereignty, and the very international system that helps to establish their authority” (2001:299). A variety of scholars motivated by postmodern, or postfoundational, concerns have taken up Philpott’s challenge in recent years. Matthew Sparke (2005) has written an extended disquisition on the ways in which destabilization has worked together with the emergence of extrastate spatial ideas and arrangements to transform the geography of power. Even though the system has changed, Sparke takes the position that conceptions of space rooted in sovereignty practices continue to permeate scholarly analyses – among post-structuralists as well as more traditional theorists. Sparke also argues that contemporary developments have not just led to the deterritorialization of social and political practices; in many arenas reterritorialization is also occurring – ensuring the continued importance of state territoriality into the foreseeable future. Sparke’s effort to bring a Foucauldian perspective to bear on the geography-sovereignty dynamic reflects a broader turn in the political geographic literature toward a concern with the role of material-discursive interactions in studies of the spatiality of governance (see e.g. Painter 2006). And his efforts to describe and theorize the interplay between deterritorialization and reterritorialization touch on a theme that figures prominently in much recent literature on the evolving nature of sovereignty in the complexly configured geopolitical world of the twenty-first century (see generally Ó Tuathail and Luke 1994). The Advantages and Disadvantages of Sovereignty Michael Fowler and Julie Bunck’s (1995) book on Law, Power, and the Sovereign State ends with a chapter titled “Why is Sovereignty Useful?” (1995:127–52). This question has been taken up in one form or another by a number of commentators, including those who have largely side-stepped debates on the evolving character of the doctrine. On one side are commentators who view sovereignty primarily as pernicious rather than useful. Taylor (1994; 1995) sees sovereignty as a doctrine that institutionalizes a territorial structure that is fundamentally at odds with the spatial realities of contemporary life and that serves to encourage and reinforce structures of exchange and control that are repressive and unjust. He thus presents sovereignty as a principle that is “sure to be abolished in any viable sustainable world. The competition engendered by states in their territories is ultimately a route to doomsday” (Taylor 1995:14). He pays particular attention to the problems posed by ecological degradation, which he argues are rooted, at least in part, in economic competition among quasi-sovereign states. As Taylor sees it, the need to address such problems will inevitably propel humanity toward a post-sovereign world (Taylor 1994:161). In an effort to advance that project, over the past decade Taylor has devoted much of his energy to a project on World Cities, which focuses attention on some of the connections and flows that are most destabilizing of the traditional territorial state system. Other indictments of the sovereignty principle focus on its negative impacts on particular places, regions, and problems. Some of these negative impacts have been suggested above (e.g. the ways in which sovereignty principles have prioritized “top–down” initiatives in the EU, worked against federal solutions to internal conflicts in Cyprus and Moldova, and discouraged joint sovereignty arrangements in zones of conflict). James Anderson’s (2008) review of the history of ethnonational conflict in Northern Ireland provides another example. He argues that Westphalian notions of territoriality have served to reinforce the simplifications that have driven ethnonational conflict in the region. As Anderson explains: the problems of national conflict and conflict management stem from shortcomings inherent to nationalism, ethnicity, sovereignty, and representative democracy, and particularly from their common dependence on territoriality or the use of bordered geographical space to organise, symbolise and control. The shortcomings are compounded by the fact that flawed assumptions about them are typically shared by external conflict managers from other national governments, as well as by the immediate nationalistic protagonists they are trying to manage. Territoriality simplifies control, and its strengths in delimiting nations and states, sovereignty and democracy, underpin the tenacity of national conflicts. But it oversimplifies and distorts social realities, especially at contested borders, and its inherent weaknesses help explain the high failure rate of management solutions. (2008:86) Countering these negative assessments of sovereignty’s role are studies that highlight the doctrine’s significance as a protector of rights and peoples. A theme running through some of the literature on indigenous communities in North America, for example, is the importance of juridical commitments to American Indian sovereignty – despite the long history of violations of those commitments. The special sovereignty status of American Indians in US law arguably represents a principle of signal importance – one that has been fought over repeatedly and that continues to offer hope as indigenous communities struggle to confront social and environmental challenges (e.g. Ranco and Suagee 2007). At a broader scale – that of the state system – it is interesting to note that some of sovereignty’s greatest proponents are those living in relatively weak, poor states. For all the fact that their de facto sovereignty has been seriously compromised by the actions of more powerful states and by globalized economic forces, those living in the global economic periphery often make the point that sovereignty provides the only check on the political and economic reach of more powerful countries – and provides at least a weak shield that permits a degree of local resistance to the forces of globalization (e.g. Petersen 1998). The foregoing line of reasoning runs counter to the frequently held assumption that state sovereignty works in opposition to human rights. There are certainly many examples where sovereignty gives state governments cover to oppress those within their jurisdictions, but Jim Russell (2005) draws the opposite lesson from the US prison at Guantánamo Bay, where an explicit erosion of legal rights has taken place based on the idea that the prison is located outside the United States’ sovereign territory. Russell argues that states may stand in the way of human rights, but they also serve as important guarantors of human rights. In support of the latter point, Russell notes that “where state territorial sovereignty is ambiguous, such as in borderlands or military bases overseas, human rights are threatened. The advancement of universal human rights may well depend on strong state sovereignty, not its erosion” (2005:38). The counterargument is that a space of exception (using the term coined by Giorgio Agamben) such as Guantánamo Bay is a product of a territorial state. Taking a different tack, Derek Gregory (2006) argues that we should not simply accept Guantánamo Bay as a space of exception, but see it instead as a space of struggle, where arguments can (and should) be advanced countering the notion that the prison is exempt from the principles of law applied to the sovereign territory of the US because of its offshore location. The foregoing examples highlight the complexities involved in assessing the advantages and disadvantages of territorial sovereignty. Adding to that complexity is the changing nature of sovereignty itself. Austen Parrish’s (2006/7) analysis of sovereignty’s impact on indigenous peoples takes the position that, over the long term, dominant Westphalian territorial notions have worked against the interests of native peoples by legitimating nation-state ideals that leave little room for minorities. He argues, though, that shifting sovereignty norms brought about by the forces of globalization and the expansion of extrastate regimes are opening up opportunities for indigenous communities and expanding their recognition under international law. He directs particular attention to decisions by the Inter-American Court of Human Rights and the Inter-American Commission on Human Rights that recognize the territorial rights of indigenous peoples (2006/7:309). These decisions have limited impact; the Commission is an advisory body and the Court has jurisdiction only over those sovereign states that have willingly ceded legal competence to it. But the rulings help to legitimate the territorial sovereignty principle advanced by many native peoples, although they also undermine a key component of Westphalian sovereignty: the dispersion of power across discrete units at only one scale. It should be clear from the foregoing examples that evaluative assessments of sovereignty are wide-ranging and disparate as to their conclusions. They reflect the complexities of sovereignty itself, as well as its potential to favor certain interests and facilitate particular possibilities at different scales and in different places. This all works against consensus, but a number of commentators see positive transformative potential in the negotiations that are taking place over the doctrine’s nature and meaning. Such negotiations are seen as enhancing the prospect for more responsive, representative political orders in places experimenting with strong suprastate institutional arrangements (Moisio 2006), and facilitating the emergence of multilayered governance structures that could give some degree of concrete political expression to the complex patterns of culture that are sublimated in a world divided into 200-odd discrete “nation-states” (Ranco and Suagee 2007). Whether such negotiations might ultimately spell the end of de jure sovereignty in its Westphalian form, however, is an open question. Where from Here? Over the past few decades, sovereignty has gone from being treated as a taken-for-granted principle to being an object of intense scrutiny. Given sovereignty’s checkered history and its changing character as an international legal norm, it is not surprising that tensions run throughout the recent literature on the concept. As the foregoing account suggests, a divide of particular significance has developed over the continuing usefulness of tying sovereignty to its Westphalian territorial roots. Almost everyone would agree with Yishai Blank’s (2006:265) contention that “[s]tates are no longer the sole bearers of rights and duties in the international sphere, nor are they the sole actors in the international arena.” The question is whether the workings of international capital, the emergence of new constellations of actors and interests, and the growing power of extrastate governance regimes have so undercut traditional sovereignty notions that we need to sever sovereignty from its historic roots. John Agnew argues that we should because a de jure territorial system is little more than an illusion. In Agnew’s (2005:437) words, de facto sovereignty “is all there is.” Countering this position, Philpott (2001), following Hall (1999), has argued that the territorial sovereignty regime that is scripted into modern international law has great normative power. He thus calls for a major research agenda focused on de jure sovereignty’s enduring impacts. There is an irony to this debate, as a number of commentators who are philosophically aligned with Philpott and Hall derive inspiration from some of John Agnew’s earlier writings, especially his piece on “the territorial trap” (Agnew 1994), which highlights the influence of a particular geographical framing of the world with roots in Westphalian territorial norms. Agnew does not directly address this tension in his 2005 piece, but perhaps it can be best reconciled by seeing his recent call for a focus on effective sovereignty as a plea to examine critically the types of arrangements that are likely to expose the vacuity of a geographical imagination that cannot see beyond states. After all, Agnew does not suggest that certain practices are not governed by Westphalian territorial norms; he just sees those practices as part of one sovereignty regime among many – and therefore concludes that the Westphalian sovereignty regime should not be privileged. The counterargument is that if sovereignty is unmoored from its territorial roots, then it simply becomes a synonym for power or control. This, in turn, ignores sovereignty’s special legal status and directs attention away from the powerful role that Westphalian territorial norms play in a variety of political, economic, and cultural arenas. Those norms do not operate in an unchanged, uncontested way, but their ongoing significance undercuts the idea that de facto sovereignty is all there is. Instead, de facto sovereignty arrangements are in dynamic tension with an institutionalized territorial system that is under increasing strain, but that continues to shape ideas and actions.

### AT: Bifo/Beller

#### Capitalism is antiracist.

Paul F. deLespinasse 20. Professor Emeritus of Political Science and Computer Science at Adrian College. “Capitalism no friend to racism”. https://www.gazettetimes.com/news/local/paul-f-delespinasse-capitalism-no-friend-to-racism/article\_85bac3a8-805b-587d-9725-0e10f09547a8.amp.html

Some people argue that eliminating racism requires getting rid of capitalism. But racism existed before capitalism developed. Since racism exists in non-capitalist societies, capitalism can't be blamed for it. True, in some ways capitalism is friendly to racism. Capitalism combines mostly free markets with predominantly private ownership of the means of production, except for land and other natural resources. (Privately owned natural resources aren't essential characteristics and must probably be abandoned if capitalism is to survive. The alternative isn't governmental ownership of natural resources, but ownership by the public, with government acting as a trustee for it.) In a market economy people are free to enter into voluntary associations, created by mutual consent, to exchange or transfer inducements. People can hire and be hired, buy and sell, mostly at mutually agreed-upon prices. Mutual consent being required, racists can refuse to enter voluntary associations with members of the target race. They can refuse to hire them, sell to them or buy from them. Racism is rooted in stereotyping, assuming that "when you have seen one (person of a certain race), you have seen them all." Since all individuals are unique, stereotyping is stupid, but freedom includes freedom to act stupidly. To this extent capitalism is racism's ally. But there is another side to this story. Although capitalism's freedom allows people to indulge their prejudices, it makes them pay for doing so. Their economic interest would be to hire the best available people without considering their race and to sell to all willing customers. Not doing this reduces their income. Since buyers and sellers want to make the best deals possible, capitalism pushes society away from racist behavior even though it won't immediately eliminate racist thinking. A notable example was a well-known bigot who owned a sports team and hired black athletes because she wanted her team to win. Racist thinking, though, should be undermined by capitalism's encouragement of voluntary associations between people of different races. Personal relations can undermine people's tendency to think in terms of stereotypes. The American South was not capitalistic before the Civil War. Slaves did not give their consent to be associated with their owners. Their association was involuntary, not voluntary. They were kept in bondage by sanctions —government's power of the sword. Capitalism didn't come to the South even after the Civil War. Once the attempted "reconstruction" reforms ended, state governments prevented the normal anti-racist capitalistic tendencies from working. Segregation made it illegal for white people and black people to enter into many kinds of voluntary associations with one another, to work together, to go to school together, even to marry. The fact that governments enacted such legislation indicates their fear that people otherwise would associate with those of different races. These restrictions clearly violated the basic essence of capitalism: freedom of voluntary association by mutual consent of the parties. Racist societies are not expressions of capitalism, but its contradiction. And they violated a fundamental requirement of good government: the rule of law. Genuine laws must be general rules of action and cannot impose sanctions on people on the basis of their race. Some more recent legislation attempting to force bigots to stop discriminating on the basis of race also contradicts the basic capitalistic principle. How can people be forced to enter voluntary associations without their consent when such associations, by definition, require mutual consent? It is no wonder that today's very well-intended antidiscrimination law is such a conceptual mess. (Open accommodation — first come, first served — laws, however, seem to work well.) Although capitalism enables bigots to discriminate, it makes them pay an economic price in the form of lost business and lost opportunities to employ the best people. Economic interest tends to pull people together. Capitalism and racism are basically deadly enemies.

### 1NC – Cap Good

#### Capitalism is sustainable and humanity’s only hope against catastrophic climate change

Shi-Ling Hsu 21, D'Alemberte Professor of Law at the Florida State University College of Law, Sept 2021, Capitalism and the Environment, Cambridge University Press, p. 50-52

2.8 CHOOSING CAPITALISM TO SAVE THE ENVIRONMENT: LARGE-SCALE DEPLOYMENT Finally, a third reason that capitalism is suited to the job of environmental restoration and protection is its ability to undertake and complete projects at very large scales. In keeping with a major thesis of this book, construction at very large scales should give us a little pause, because of the propensity of capital to metastasize into a source of political resistance to change. But some global problems, especially climate change, may require very large-scale enterprises. For example, because greenhouse gas emissions may already have passed a threshold for catastrophic climate change, technology is almost certainly needed to chemically capture carbon dioxide from ambient air. But carbon dioxide is only about 0.15% of ambient air by molecular weight, and a tremendous amount of ambient air must be processed just to capture a small amount of carbon dioxide. This technology has often been referred to as "direct air capture," or "carbon removal." Given that inherent limitation, direct air capture technology must be deployed at vast scales in order to make any appreciable difference in greenhouse gas concentrations. There is certainly no guarantee that direct air capture will be a silver bullet. But if it is to be an effectual item on a menu of survival techniques, it will more assuredly be accomplished under the incentives of a capitalist economy. Capitalism might also help with the looming crisis of climate change by helping to ensure the supply of vital life staples such as food, water, and other basic needs in future shortages caused by climate-change. In a climate-changed future, there is the distinct possibility that supplies of vital life staples may run short, possibly for long periods of time. Droughts are projected to last longer, with water supplies and growing conditions increasingly precarious. Capitalist enterprise could, first of all, provide the impetus to finally reform a dizzying multitude of price distortions that plague water supply and agriculture worldwide. Second, capitalist enterprise can undertake scale production of some emergent technologies that might alleviate shortages. Desalination technology can convert salty seawater into drinkable freshwater.54 A number of environmental and economic issues need to be solved to deploy these technologies at large scales, but in a crisis, solutions will be more likely to present themselves. A technology that is already being adopted to produce food is the modernized version of old-fashioned greenhouses. The tiny country of the Netherlands, with its 17 million people crowded onto 13,000 square miles, is the second largest food exporter in the world,55 exporting fully three-quarters that of the United States in 2017.56 The secret to Dutch agriculture is its climate-controlled, low-energy green-houses that project solar panel-powered artificial sunlight around the clock. Dutch greenhouses produce lettuce at ten times the yield57 and tomatoes at fifteen times the yield outdoors in the United States58 while using less than one-thirteenth the amount of water,59 very little in the way of synthetic pesticides and, of course, very little fertilizer given its advanced composting techniques. Sustained shortages in a climate-changed future might require that a capitalist take hold of greenhouse growing and expand production to feed the masses that might otherwise revolt. 2.9 CHOOSE CAPITALISM Clearly, the job in front of humankind is enormous, complex, and many-faceted. The best hope is to be able to identify certain human impacts that are clearly harmful to the global environment, and to disincentivize them. Getting back to notions of institutions in capitalism, what is crucial is aligning the right incentives with profit-making activity. What capitalism does so well — beyond human comprehension — is coordinate activity and send broad signals about scarcity. Information about a wide variety of environmental phenomena is extremely difficult to collect and process. If a set of environmental taxes can help establish a network of environ-mental prices, then an unfathomably large and complex machinery will have been set in motion in the right direction. Also, because of the need for new scientific solutions to this daunting list of problems, new science and technology is desperately needed. Capitalism is tried and true in terms of producing innovation. Again drawing upon the study of institutions, it is not so much that individuals need a profit-motive in order to tinker, but the prospect of profit-making has to be present in order for institutions, including corporations, to devote resources, attention, and energy towards the development of solutions to environmental problems. Corporations can and should demonstrate social responsibility by attempting to mitigate their impacts on the global environment, but a much more conscious push for new knowledge, new techniques, and new solutions are needed. Finally, the scale of needed change is profound. Huge networks of infrastructure centered upon a fossil fuel-centered economy must somehow be replaced or adapted to new ways of generating, transmitting, consuming, and storing energy. A global system of feeding seven billion humans (and counting), unsustainable on its face, must be morphed into something else that can fill that huge role. About a billion and a half cars and trucks in the world must, over time, be swapped out for vehicles that must be dramatically different. This is a daunting to-do list, but look a bit more carefully among the gloomy news. Elon Musk, a freewheeling, pot-smoking entrepreneur shows signs of breaking into not one, but two industries dominated by behemoths with political power. Thanks to California emissions standards, automobile manufacturers have developed cars that emit a fraction of what they did less than a generation ago. Hybrid electric vehicles have thoroughly penetrated an American market that powerful American politicians had tried to cordon off for American manufacturers only. At least two companies have developed meat substitutes that are now widely judged to be indistinguishable from meat, and have established product outposts in the ancient power centers of fast food, McDonald's and Burger King. The tiny country of the Netherlands, about half the size of West Virginia, exports almost as much food as the United States, able to ship fresh produce all the way to Africa. At bottom, all of these accomplishments and thousands more are and were capitalist in nature. While they collectively repre-sent a trifle of what still needs to be accomplished, they were also undertaken without the correct incentives in place, and thus also represent the tremendous promise of capitalism.

#### Warming causes extinction

Melton 19 [Michelle Melton is a 3L at Harvard Law School. Before law school, she was an associate fellow in the Energy and National Security Program at the Center for Strategic and International Studies, where she focused on climate policy. Climate Change and National Security, Part II: How Big a Threat is the Climate? January 7, 2019. https://www.lawfareblog.com/climate-change-and-national-security-part-ii-how-big-threat-climate]

At least until 2050, and possibly for decades after, climate change will remain a creeping threat that will exacerbate and amplify existing, structural global inequalities. While the developed world will be negatively affected by climate change through 2050, the consequences of climate change will be felt most acutely in the developing world. The national security threats posed by climate change to 2050 are likely to differ in degree, not kind, from the kinds of threats already posed by climate change. For the next few decades, climate change will exacerbate humanitarian crises—some of which will result in the deployment of military personnel, as well as material and financial assistance. It will also aggravate natural resource constraints, potentially contributing to political and economic conflict over water, food and energy.

The question for the next 30 years is not “can humanity survive as a species with 1.5°C or 2°C of warming,” but, “how much will the existing disparities between the developed and developing world widen, and how long (and how successfully) can these widening political/economic disparities be sustained?” The urgency of the climate threat in the next few decades will depend, to a large degree, on whether and how much the U.S. government perceives a widening of these global inequities as a threat to U.S. national security.

By contrast, if emissions continue to creep upward (or if they do not decline rapidly), by 2100 climate-related national security threats could be existential. The question for the next hundred years is not, “are disparities politically and economically manageable?” but, “can the global order, premised on the nation-state system, itself based on territorial sovereignty, survive in a world in which substantial swathes of territory are potentially uninhabitable?”

National Security Consequences of Climate Change to 2050

Scientists can predict the consequences of climate change to 2050 with some measure of certainty. (Beyond that date, the pace and magnitude of climate change—and therefore, the national security threat posed by it—depend heavily on the level of emissions in the coming years, as I have explained.) There is relative agreement across modeled climate scenarios that the world will likely warm, on average, at least 1.5°C above pre-industrial levels by about 2050—but perhaps as soon as 2030. This level of warming is likely to occur even if the world succeeds in dramatically reducing greenhouse gas emissions, as even the recent Intergovernmental Panel on Climate Change (IPCC) report implicitly admits. In other words, a certain amount of additional warming—at least 1.5°C, and probably more than that—is presumptively unavoidable.

Looking ahead to 2050, it can be said with relative confidence that the national security consequences of climate change will vary in degree, not in kind, from the national security threats already facing the United States. This is hardly good news. Even small differences in global average temperatures result in significant environmental changes, with attendant social, economic and political consequences. By 2050, climate change will wreak increasing havoc on human and natural systems—predominantly, but not exclusively, in the developing world—with attenuated but profound consequences for national security.

In particular, changes in temperature, the hydrological cycle and the ranges of insects will impact food availability and food access in much of the world, increasing food insecurity. Storms, flooding, changes in ocean pH and other climate-linked changes will damage infrastructure and negatively impact labor productivity and economic growth in much of the world. Vector-borne diseases will also become more prevalent, as climate change will expand the geographic range and intensity of transmission of diseases like malaria, West Nile, Zika and dengue fever, and cholera. Rising public health challenges, economic devastation and food insecurity will translate into an increased demand for humanitarian assistance provided by the military, increased migration—especially from tropical and subtropical regions—and geopolitical conflict.

Long-term trends such as declining food security, coupled with short-term events like hurricanes, could sustain unprecedented levels of migration. The 2015 refugee crisis in Europe portends the kinds of population movements that will only accelerate in the coming decades: people from Africa, Southwest and South Asia and elsewhere crossing land and water to reach Europe. For the United States, this likely means greater numbers of people seeking entry from both Central America and the Caribbean. Such influxes are not unprecedented, but they are unlikely to abate and could increase in volume over the next few decades, driven in part by climate change-related food insecurity, climate change-related storms and also by economic and political instability. Food insecurity, economic losses and loss of human life are also likely to exacerbate existing political tensions in the developing world, especially in regions with poor governance and/or where the climate is particularly vulnerable to warming (e.g., the Mediterranean basin). While the Arab Spring had many underlying causes, it also coincided with a period of high food prices, which arguably contributed to the protests. In some situations, food insecurity, economic losses and public health crises, combined with weak and ineffectual governance, could precipitate future conflicts of this kind—although it will be difficult to know where and when without more precise local studies of both underlying political dynamics and the regionally-specific impacts of climate change.

2100 and Beyond

While the national security impacts of climate change to 2050 are likely to be costly and disruptive for the U.S. military—and devastating for many people around the world—at some point after 2050, if warming continues at its current pace, changes to the climate could fundamentally reshape geopolitics and possibly even the current nation-state basis of the current global order.

To be clear, both the ultimate level of warming and its attendant political consequences is highly speculative, for the reasons I explained in my last post. Nonetheless, we do know that the planet is currently on track for at least 3-4°C of warming by 2100. The “known knowns” of higher levels of warming—say, 3°C—are frightening. At that 3°C of warming, for example, scientists project that there will be a nearly 70 percent decline in wheat production in Central America and the Caribbean, 75 percent of the land area in the Middle East and more than 50 percent in South Asia will be affected by highly unusual heat, and sea level rise could displace and imperil the lives hundreds of millions of people, among other consequences.

But even higher levels of warming are physically possible within this century. At these levels of warming, some regions of the world would be literally uninhabitable, likely resulting in the depopulation of the tropics, to say nothing of the consequences of sea-level rise for economically important cities such as Amsterdam and New York. Even if newly warmed regions of the far north could theoretically accommodate the resulting migrants, this presumes that the political response to this unprecedented global displacement would be orderly and conflict-free borders on fantasy.

The geopolitical consequences of significant levels of warming are severe, but if these changes occur in a linear way, at least there will be time for human systems to adjust. Perhaps more challenging for national security is the possibility that the until-now linear changes give way to abrupt and irreversible ones. Scientists forecast that, at higher levels of warming—precisely what level is speculative—humanity could trigger catastrophic, abrupt and unavoidable consequences to the ecosystem. The IPCC has considered nine such abrupt changes; one example is the potential shutting down of the Indian summer monsoon. Over a billion people are dependent upon the Indian monsoon, which provides parts of South Asia with about 80 percent of its annual rainfall; relatively minor changes in the monsoon in either direction can cause disasters. In 2010, a wetter monsoon led to the catastrophic flooding in Pakistan, which directly affected 20 million people; a drier monsoon in 2002 led to devastating drought. Studies suggest that the Indian summer monsoon has two stable states: wet (i.e., the current state) and dry (characterized by low precipitation over the subcontinent). At some point, if warming continues, the monsoon could abruptly shift into the second, “dry” state, with catastrophic consequences for over a billion people dependent on monsoon-fed agriculture. The IPCC suggests that such a state-shift is “unlikely”—that is, there is a 10 to 33 percent chance that a state-shift will happen in the 21st century—but scientists also have relatively low confidence in their understanding of the underlying mechanisms in this and other large-scale natural systems.

The consequences of abrupt, severe warming for national security are obvious in general, if unclear in the specifics. In 2003, the Defense Department asked a contractor to explore such a scenario. The resulting report outlined the offensive and defensive national security strategies countries may adopt if faced with abrupt climate change, and highlighted the increased risk of inter- and intra-state conflict over natural resources and immigration. Although the report may be off in its imagined timeframe (positing abrupt climate change by 2020), the world it conjures is improbable but not outlandish. If the Indian monsoon were to switch to dry state, and a billion people were suddenly without reliable food sources, for example, it is not clear how the Indian government would react, assuming it would survive in its current form. Major wars or low-intensity proxy conflicts seem likely, if not inevitable, in such a scenario.

This is not to say that a parade of climate horribles is certain—or even likely—to come to pass. Scientific understanding of the sensitivities in the climate system are far from perfect. It is also possible that emissions will decline more rapidly than anticipated, averting the worst consequences of climate change. But this outcome is far from guaranteed. And even if global emissions decline precipitously, humanity cannot be sure when or whether the planet has crossed a climate tipping point beyond which the incremental nature of the current changes shifts from the current linear, gradual progression to a non-linear and abrupt process.

Within the next few decades, the most likely scenario involves manageable, but costly, consequences on infrastructure, food security and natural disasters, which will be borne primarily by the world’s most impoverished citizens and the members of the military who provide them with humanitarian assistance and disaster relief. But while the head-turning national security impacts of climate change are probably several decades away, the nature of the threat is such that waiting until these changes manifest is not a viable option. By the time the climate consequences are severe enough to compel action, there is likely to be little that can be done on human timescales to undo the changes to environmental systems and the human societies dependent upon them.