## 1AC—Plan

#### Plan: The appropriation of outer space through lunar mining by private entities should be banned.

### Advantage – Lunar Competition

#### Private companies are set to mine on the moon – financial incentives and state funding set a legal precedent for private activity on the moon.

**Helmore 20** [Edward Helmore, 9-11-2020, "Nasa is looking for private companies to help mine the moon," <https://www.theguardian.com/science/2020/sep/11/nasa-moon-mining-private-companies>] [pT]

Nasa has announced it is looking for private companies to go to the moon and collect dust and rocks from the surface and bring them back to Earth. The American space agency would then buy the moon samples in amounts between 50 to 500 grams for between $15,000 to $25,000. The Nasa administrator, Jim Bridenstine, announced on Thursday that the moon material collection would become part of a technology development program that would help astronauts “live off the land” for crewed missions in the future to the moon or elsewhere. Bridenstine [wrote that the agency](https://twitter.com/JimBridenstine/status/1304049845309669376?s=20) “is buying lunar soil from a commercial provider. It’s time to establish the regulatory certainty to extract and trade space resources.” The collection is part of Nasa’s [Artemis](https://www.nasa.gov/artemis) lunar exploration program established last year to land US astronauts, including the first woman and the next man, on the moon by 2024. The agency has indicated that missions further afield, to Mars for instance, will require the use of locally mined resources. “We will use what we learn on and around the moon to take [the next giant leap](http://www.nasa.gov/specials/moon2mars/) – sending astronauts to Mars,” Bridenstine wrote. [In a blogpost,](https://blogs.nasa.gov/bridenstine/2020/09/10/space-resources-are-the-key-to-safe-and-sustainable-lunar-exploration/) Bridenstine said the effort would comply with the [Outer Space Treaty of 1967](https://history.nasa.gov/1967treaty.html), which says that no country may lay sovereign claim to the moon or other celestial bodies in much the same way that the Antarctic continent is off-limits for territorial conquest. In May, Nasa [unveiled a legal framework](https://www.washingtonpost.com/technology/2020/05/15/moon-rules-nasa-artemis/) that would govern the behavior of countries and companies in space and on the moon. The legal framework, known as the Artemis Accords, include the creation of “safety zones” around sites where mining and exploration would take place on the lunar surface. Nasa’s top administrator also told a [forum](https://swfound.org/events/2020/planetary-protection-and-lunar-activities) held by the Secure World Foundation that the policies that will govern mining from celestial bodies would be much the same as those that currently exist for the world’s oceans. “We do believe we can extract and utilize the resources of the moon, just as we can extract and utilize tuna from the ocean,” he said, without referring to overfishing and pollution that is rapidly destroying fish stocks in many regions. Unlike fisheries, however, participating celestial mining companies would be required to provide imagery of the material and the location from which it was recovered. Nasa already has a separate program to contract companies to fly science experiments and cargo to the moon ahead of a human landing. Those include Astrobotic, SpaceX, Blue Origin, Sierra Nevada Corp and Lockheed Martin. Bridenstine said he anticipated some of those might also be interested in lunar mining. Casey Dreier, chief advocate & senior space policy adviser at the Planetary Society, [wrote on Twitter](https://twitter.com/CaseyDreier/status/1304080050262736896) that the importance of Nasa’s announcement is “not so much the financial incentive (which is tiny) but in establishing the legal precedent that private companies can collect and sell celestial materials (with the explicit blessing of NASA/U.S. gov)”.

#### That’s set to drive conflict- current treaties have zero authority and lack clarity—creates ineffective regulations.

**Jasmamie 21** [Cecilia Jasmamie, 2-2-2021, "Experts warn of brewing space mining war among US, China and Russia," MINING, <https://www.mining.com/experts-warn-of-brewing-space-mining-war-among-us-china-and-russia/>] [pT]

A brewing war to set a mining base in space is likely to see China and Russia joining forces to keep the US increasing attempts to dominate extra-terrestrial commerce at bay, experts warn.  The Trump Administration took an active interest in space, announcing that America would [return astronauts to the moon](https://www.nytimes.com/2019/03/26/science/nasa-moon-pence.html) by 2024 and creating the [Space Force](https://www.npr.org/2019/12/21/790492010/trump-created-the-space-force-heres-what-it-will-do) as the newest branch of the US military. It also proposed global legal framework for mining on the moon, called the Artemis Accords, encouraging citizens to mine the Earth’s natural satellite and other celestial bodies with commercial purposes. The directive classified outer space as a “legally and physically unique domain of human activity” instead of a “global commons,” paving the way for mining the moon without [any sort of international treaty.](https://www.mining.com/how-earth-bound-mining-lawyers-think-about-space-mining/) Spearheaded by the US National Aeronautics and Space Administration (NASA), the Artemis Accords [were signed in October](https://www.businessinsider.com/nasa-artemis-accords-deep-space-exploration-moon-mars-asteroids-comets-2020-10) by Australia, Canada, England, Japan, Luxembourg, Italy and the United Emirates. “Unfortunately, the Trump Administration exacerbated a national security threat and risked the economic opportunity it hoped to secure in outer space by failing to engage Russia or China as potential partners,” says Elya Taichman, former legislative director for then-Republican Michelle Lujan Grisham. “Instead, the Artemis Accords have driven China and Russia toward increased cooperation in space out of fear and necessity,” [he writes](https://www.politico.com/news/2021/01/29/biden-space-diplomacy-russia-china-455963). Russia’s space agency Roscosmos was the first to speak up, [likening the policy to colonialism](https://www.mining.com/russia-slams-trumps-order-to-spur-mining-the-moon-asteroids/). “There have already been examples in history when one country decided to start seizing territories in its interest — everyone remembers what came of it,” Roscosmos’ deputy general director for international cooperation, Sergey Saveliev, said at the time. China, which made history in 2019 by becoming the [first country](https://www.washingtonpost.com/science/2019/01/03/china-lands-spacecraft-far-side-moon-historic-first/) to land a probe on the far side of the Moon, chose a different approach. Since the Artemis Accords [were first announced](https://www.mining.com/russia-slams-trumps-order-to-spur-mining-the-moon-asteroids/), Beijing has approached Russia to [jointly build a lunar research base](https://tass.com/science/1181861). President Xi Jinping has also he made sure [China planted its flag on the Moon](https://www.bbc.com/news/world-asia-china-55192692), which happened in December 2020, more than 50 years after the US reached the lunar surface. The next Wild West? China has historically been excluded from the US-led international order in space. It is not a partner in the International Space Station (ISS) program, and a US legislative provision has limited NASA’s ability to cooperate with it in space since 2011.

#### The race to the lunar reservoir ensures escalation – only a prohibition on private entities checks.

#### **1 -- Proximity – sites are too close to each other and resources are limited.**

**Smith 20** [Adam Smith, 11-24-2020, "Scientists fear conflicts over the Moon’s resources between governments and companies," Independent, <https://www.independent.co.uk/life-style/gadgets-and-tech/moon-government-companies-resources-conflicts-b1761170.html>] [pT]

Scientists fear that the Moon might be plundered too quickly by private companies hoping to extract its valuable resources, new research has hypothesized. A lack of international policies and agreements could result in tensions, overcrowding, and a rapid expansion of moon mining projects, the Center for Astrophysics | Harvard & Smithsonian says in a new paper. Water and iron are particularly valuable resources that could be collected from the Moon, which would help companies construct infrastructure and develop agriculture as well as letting them avoid the vast expense of transporting such materials from the Earth. "A lot of people think of space as a place of peace and harmony between nations. The problem is there's no law to regulate who gets to use the resources, and there are a significant number of space agencies and others in the private sector that aim to land on the moon within the next five years," said Martin Elvis, astronomer at the Center for Astrophysics | Harvard & Smithsonian and the lead author on the paper, which has been published in [Philosophical Transactions of the Royal Society A.](http://dx.doi.org/10.1098/rsta.2019.0563) "We looked at all the maps of the Moon we could find and found that not very many places had resources of interest, and those that did were very small. That creates a lot of room for conflict over certain resources." The treaties that do exist, such as the 1967 Outer Space Treaty, do not offer staunch protection of celestial bodies from companies. The Outer Space Treaty declares that “the moon and other celestial bodies shall be used by all states parties to the treaty exclusively for peaceful purposes”, but is not exclusive to governments. The United States insisted on a clause that [allowed commercial companies to explore space](https://www.independent.co.uk/news/long_reads/if-no-one-owns-moon-can-anyone-make-money-there-space-astronomy-a8087126.html) as long as they “require authorisation and continuing supervision” of the government, as opposed to the Russian view that space exploration should be limited to governments. A following treaty, the 1979 Moon Treaty, has not been ratified by any state that engages in self-launched spaceflight such as the US, Russia, China, Japan, or members of the European Space Agency. "It tries to address the ownership of resources obtained from outer space, and really it was pretty much rejected by the international community”, Dr Jill Stuart, head of space policy at the London School of Economics, [previously told The Independent.](https://www.independent.co.uk/news/world/who-owns-outer-space-and-what-happens-when-corporations-want-extract-resources-asteroids-or-planets-10492126.html) In 2020 the [Artemis Accords were announced](https://www.independent.co.uk/life-style/gadgets-and-tech/news/nasa-moon-mission-artemis-accords-us-china-a9517091.html), which are a set of agreements that requires countries working with the US to return to the moon to commit to transparency about their work, to only explore space for “peaceful purposes”, and to guarantee they would work together to save any astronauts that came into danger during a mission. However, this still does not protect celestial bodies from being overly exploited for resources. "The biggest problem is that everyone is targeting the same sites and resources: states, private companies, everyone. But they are limited sites and resources. We don't have a second moon to move on to. This is all we have to work with." Alanna Krolikowski, assistant professor of science and technology policy at Missouri University of Science and Technology, and a co-author on the paper, said in a statement. "While a comprehensive international legal regime to manage space resources remains a distant prospect, important conceptual foundations already exist and we can start implementing, or at least deliberating, concrete, local measures to address anticipated problems at specific sites today."

#### 2 -- International Dominance – great powers want to appear hegemonically superior.

Cunningham 22 [Philip J. Cunningham has been a regular visitor to China since 1983, working variously as a tour guide, TV producer, freelance writer, independent scholar and teacher. He has conducted media research in China as a Knight Fellow and Fulbright Scholar and was the recipient of a Nieman Fellowship at Harvard. He is the author of Tiananmen Moon, a first-hand account of the 1989 protests in Beijing.] “US extends rivalry with China to the moon as it resists cooperation and seeks control over mining,” January 23rd, 2022, South China Morning Post, <https://www.scmp.com/comment/opinion/article/3164195/us-extends-rivalry-china-moon-it-resists-cooperation-and-seeks>, VM

US extends rivalry with China to the moon as it resists cooperation and seeks control over mining; Nasa claims its Artemis lunar programme will promote diversity and cooperation, but fellow space powers China and Russia have been left out in the cold. With the US attempting to lay down rules for mineral extraction, the new space race looks set to divide the world – and the moon – along Cold War fault lines There’s enough strife on land, sea and in the air to keep US Cold Warriors and their Wolf Warrior counterparts in China sparring for a long time to come, but the race to create zones of influence and secure resources doesn’t begin and end with planet Earth. With the roll-out of Nasa’s Space Launch System rocket and Orion spacecraft last March in support of the US Artemis Programme, the moon has been added to the mix. “Through Artemis, Nasa aims to land the first woman and first person of colour on the moon,” the mission statement reads. The US will “collaborate with commercial and international partners and establish the first long-term presence on the moon”. At first glance, both China and Russia would be logical international partners, but the statement has a distinctly American accent. It’s not the first time the US has tried to set the terms by which other nations can explore Earth’s only natural satellite. A US-scripted “Moon Treaty” was drawn up in 1979 but eventually withered away because the tiny handful of nations capable of competing with the US in space were not interested in signing away their rights. Even the flag-waving president Donald Trump came to disdain the treaty because it suggested that the moon should be treated as part of a “global commons” rather than as a private resource base that individual nations and corporations could exploit. Eager to approve American mining on the moon, Trump issued an executive order on April 6, 2020, “Encouraging International Support for the Recovery and Use of Space Resources”. The moribund 1979 Moon Treaty was thus scrapped. In Trumpian terms, it was “a failed attempt at constraining free enterprise”. The executive order issued by Trump is still in effect and the language has been altered only slightly. The goal of sending the “first woman and next man” to the moon was amended by the Biden administration to read “first woman and first person of colour”. There are several ironies inherent in the way US leaders talk about the space programme. One is the partisan political flavour; the Democrats emphasise its links with identity politics, while Republicans emphasise the capitalist free market element. But neither party wants to be stuck with the budget shortfalls and delays that have dogged the programme from day one. And no one is talking about including China. Given the way Nasa promotes astronaut identity, there’s a further irony in the fact that China happens to have a woman in space at this very moment, and has been sending, by the arcane terms of the US mission statement, “persons of colour” into space since the inception of their programme. If human diversity was really a serious goal of the Artemis programme, there would be scant reason not to cooperate with China. Or Russia for that matter. But why should China and Russia sign on to a day-late, dollar-short programme jump-started by Trump that defines the rules of exploitation on US terms? The US has solicited a number of allies to sign on the Artemis Accords, including members of the Five Eyes intelligence sharing bloc, as well as Japan and South Korea. But it is the recent inclusion of Ukraine that speaks volumes about the political cast of the programme. What the mission statement is really saying is that the US reserves the right to exploit the mineral resources of the moon, and will do so with allies of its choosing and within guidelines of its own creation. As for China and Russia, the only two serious rivals to the US in space, they have been left out in the cold. The Artemis Accords add another brick to the regulatory firewall the US has built regarding cooperation with China in space. The 2011 Wolf Amendment prohibited such cooperation, with the unsurprising result that China has taken a go-it-alone approach ever since. Furthermore, the inclusion in the US space bloc of Ukraine, a bitter adversary of Russia, only serves to increase the likelihood that China and Russia will look to one another as partners in space. Already, plans for a Sino-Russian moon base are being touted. The implicit anti-China gist of the Artemis programme is symptomatic of US party-driven politics in general. On the one hand, there’s a seemingly unbridgeable political divide at home; on the other, one administration looks the same as the other when viewed from afar. The ostensible aim of the Artemis programme is to promote cooperation, diversity and set down rules for lunar exploration. In reality, it is dividing the world into two camps, following the familiar East-West fault lines established in the last Cold War.

#### **3** --Rapid militarization in fear of losing resources on the Moon

David 21 [Leonard David is an award-winning space journalist who has been reporting on space activities for more than 50 years. Currently writing as Space.com's Space Insider Columnist among his other projects, Leonard has authored numerous books on space exploration, Mars missions and more, with his latest being "Moon Rush: The New Space Race" published in 2019 by National Geographic. He also wrote "Mars: Our Future on the Red Planet" released in 2016 by National Geographic. Leonard has served as a correspondent for SpaceNews, Scientific American and Aerospace America for the AIAA.] December 06, 2021, “Military interest in the moon is ramping up,” <https://www.space.com/military-interest-moon-cislunar-space>, VM

“There is growing interest in protecting strategic assets in cislunar space, the realm between Earth and the moon. The U.S. Space Force is not the only entity engaged in reflecting on the topic of how best to extend military presence far from Earth. **Other nations such as China are doing so as well.** Parallel to air, land and sea skirmishes between nations here on Earth, is cislunar space, and perhaps the moon itself, an emerging military "high ground" and new territory for conflict? There’s a variance of views, according to experts Space.com talked to. Cislunar primer Earlier this year, the Air Force Research Laboratory distributed "A Primer on Cislunar Space," a document targeted at military space professionals who will answer the call to develop plans, capabilities, expertise and operational concepts for the region. "Cislunar space has recently become prominent in the space community and warrants attention," the document explains. As the U.S. Space Force "organizes, trains, and equips to provide the resources necessary to protect and defend vital U.S. interests in and beyond Earth orbit," the primer also underscores that new collaborations will be key to "operating safely and securely on these distant frontiers." Visionary wish list In the interim, the Defense Sciences Office at the U.S. Defense Advanced Research Projects Agency (DARPA) has blueprinted a wish list of new research to enable the fabrication of future space structures — including the use of lunar resources to enable those structures. Some of that research will be performed by the Novel Orbital and Moon Manufacturing, Materials and Mass-efficient Design program, or NOM4D. NOM4D aims to develop new materials, manufacturing, and design technologies to enable future structures to be built in Earth orbit or on the moon's surface. For instance, large solar arrays, large radio frequency reflector antennas and segmented infrared reflective optics are visualized. Building a precision structure while minimizing the required mass fraction brought from Earth will enable a spectrum of Department of Defense systems to be built using lunar-derived materials, DARPA officials say. "For the purposes of understanding the hypothetical use case, proposers may consider fabrication of structures on orbit or on the lunar surface for relaunch back into orbit as long as the proposed system is consistent with the Outer Space Treaty," NOM4D documentation explains. Contract negotiations are currently underway, with the selection of NOM4D winners soon to be announced, DARPA has advised Space.com. Military moon The U.S. military has eyed the moon before. As far back as 1959, when NASA was still picking its first astronauts, the U.S. Army was concocting **plans for a moon base**, under the title of Project Horizon, explained Robert Godwin, a space historian and owner of Apogee Books, a Canadian publishing house that examines a variety of space history topics. Some details of the U.S. military's past interest in the moon remain classified to this day, Godwin said. In particular, there were looks at a nuclear bomb detonation in orbit around the moon that would empower "the weapon" — an X-ray laser that would take out enemy satellites and spacecraft, he told Space.com. That was then. But valuable U.S. assets on the moon, such as planned commercial ventures there, will make "the **military presence** to ensure their safety," Godwin said, "almost inevitable."

#### No thumpers -- commercial mining on the moon comes lexically prior to other forms of mining in space **Gilbert 21** [Alex Gilbert is a complex systems researcher and a PhD student in space resources at the Colorado School of Mines. He is a fellow at the Payne Institute at the Colorado School of Mines and is the cofounder of SparkLibrary.] April 26th, 2021, “Mining in Space is Coming,” https://www.milkenreview.org/articles/mining-in-space-is-coming, VM

“The Moon is **a prime space mining target**. Boosted by NASA’s mining solicitation, it is likely the first location for commercial mining. The Moon has **several advantages**. It is relatively close, requiring a journey of **only several days** by rocket and creating communication lags of only a couple seconds — a delay small enough to allow remote operation of robots from Earth. Its low gravity implies that relatively **little energy expenditure** will be needed to deliver mined resources to Earth orbit.”

#### Competition over the moon space explodes geopolitical tensions and escalates through satellite use.

Skibba 18 [Nautilus, “Mining in Space Could Lead to Conflicts on Earth”, Ramin Skibba is a science writer and astrophysicist based in Santa Cruz and San Diego. URL: <https://nautil.us/mining-in-space-could-lead-to-conflicts-on-earth-2-7300/>] KR Recut VM

Major space-faring nations are not among the 16 countries party to the treaty, but they should arguably come to some equitable agreement, since international competition over natural resources in space may very well transform into conflict. Take platinum-group metals. Mining companies have found about 100,000 metric tons of the stuff in deposits worldwide, mostly in South Africa and Russia, amounting to $10 billion worth of production per year, according to the U.S. Geological Survey. These supplies should last several decades if demand for them doesn’t rise dramatically. (According to Bloomberg, supply for platinum-group metals is constrained while demand is increasing.) Palladium, for example, valued for its conductive properties and chemical stability, is used in hundreds of millions of electronic devices sold annually for electrodes and connector platings, but it’s relatively scarce on Earth. A single giant, platinum-rich asteroid could contain as much platinum-group metals as all reserves on Earth, the Google-backed Planetary Resources claims. That’s a massive bounty. As Planetary Resources and other U.S. and foreign companies scramble for control over these valuable space minerals, competing “land grabs” by armed satellites may come next. Platinum-group metals in space may serve the same role as oil has on Earth, threatening to extend geopolitical struggles into astropolitical ones, something Trump is keen on preparing for. Yesterday he said he’s seriously weighing the idea of a “Space Force” military branch. NASA’s increasing collaboration with space mining companies could distort and divert efforts previously focused on space exploration. Moreover, the technology that might enable this free-for-all—versatile “nanosatellites,” no larger than a loaf of bread—is relatively inexpensive. While reporting for a story about these tiny satellites, also known as CubeSats, I came across some missions applicable to mining asteroids. In November, NASA will launch a satellite for a mission called Near-Earth Asteroid Scout, for example. It will deploy a solar sail, propel itself with sunlight, and journey to the asteroid belt, where it will scope out a particular asteroid and analyze its properties. NASA has also awarded grants to Planetary Resources to advance the designs of spectral imagers and propulsion systems for CubeSats, and other missions will develop the satellites’ abilities to communicate and network with each other. NASA also awarded Deep Space Industries contracts to assess commercial approaches for NASA’s asteroid goals, which may involve hosting DSI’s asteroid-prospecting equipment on its missions. Like all forms of mining, it will be dangerous. If space-mining activities break up asteroids, the resulting debris could be hazardous for satellites, other spacecraft, and astronauts nearby. On the other hand, in a best-case scenario, space mining could be environmentally safe, capture only necessary minerals and water, and, in the more distant future even lead to the construction of a far-flung space station led by NASA and other space agencies, orbiting 200 million miles from Earth and serving as both a mining depot and a pit-stop for passing spacecraft. But it’s not clear that a pact between the commercial space mining industry and NASA would align with the public’s interest. NASA’s increasing collaboration with space mining companies could distort and divert efforts previously focused on space exploration andbasicresearch, anddiscourage public interest and engagement in astronomy. For example, Seager advocated for space mining at a science writing conference I attended in 2015. She’s part of a motley group of advisors for Planetary Resources, including the movie director James Cameron, a lawyer for a prominent Washington D.C. firm, and Dante Lauretta, another astronomer whom I respect. Seager seems to believe that encouraging private space mining will lead to more investments and technological innovation that would enable more scientific research. In a 2012 interview with The Atlantic, for instance, she said, “The bottom line is that NASA is not working the best that it could for space science right now, and so in order for people like me to succeed with my own research goals, the commercial space industry needs to be able to succeed independently of government contracts.” But if the U.S. and U.S.-based companies lay claim to the richest and most easily accessible prospecting sites, not allowing other companies and nations to share in the wealth, economic and political relations could be damaged. That’s why this seems to be a dangerous path for space explorers. Once you’re on board with the commercial space industry, then you as a researcher must accept, if not support, everything that comes with it. Seager and a few other researchers may be willing to take this risk, but what about the rest of the space science community? Moreover, to succeed, these businesses will seek profitable missions, while science, exploration, and discovery—goals that stimulate public interest—will inevitably have lower priority. (Other commercial spaceflight companies, like Elon Musk’s SpaceX, do generate public interest, but they’re not directly involved in mining asteroids.) NASA may have its shortcomings, but at least its missions and research goals answer to the public. It’s not exactly a welcome thought to imagine more and more of our presence and activity in space being ceded, with NASA’s help, to private industry.

#### Space wars go nuclear and tensions uniquely spill down to Earth

Grego 18 [Laura, Senior Scientist in the Global Security Program at the Union of Concerned Scientists, Postdoctoral Researcher at the Harvard-Smithsonian Center for Astrophysics, PhD in Experimental Physics at the California Institute of Technology, Space and Crisis Stability, Union of Concerned Scientists, 3-19-18, <https://www.law.upenn.edu/live/files/7804-grego-space-and-crisis-stabilitypdf>]

Why space is a particular problem for crisis stability For a number of reasons, space poses particular challenges in preventing a crisis from starting or from being managed well. Some of these are to do with the physical nature of space, such as the short timelines and difficulty of attribution inherent in space operations. Some are due to the way space is used, such as the entanglement of strategic and tactical missions and the prevalence of dual-use technologies. Some are due to the history of space, such the absence of a shared understanding of appropriate behaviors and consequences, and a dearth of stabilizing personal and institutional relationships. While some of these have terrestrial equivalents, taken together, they present a special challenge. The vulnerability of satellites and first strike incentives Satellites are inherently fragile and difficult to protect; in the language of strategic planners, space is an “offense-dominant” regime. This can lead to a number of pressures to strike first that don‘t exist for other, better-protected domains. Satellites travel on predictable orbits, and many pass repeatedly over all of the earth‘s nations. Low-earth orbiting satellites are reachable by missiles much less capable than those needed to launch satellites into orbit, as well as by directed energy which can interfere with sensors or with communications channels. Because launch mass is at a premium, satellite armor is impractical. Maneuvers on orbit need costly amounts of fuel, which has to be brought along on launch, limiting satellites‘ ability to move away from threats. And so, these very valuable satellites are also inherently vulnerable and may present as attractive targets. Thus, an actor with substantial dependence on space has an incentive to strike first if hostilities look probable, to ensure these valuable assets are not lost. Even if both (or all) sides in a conflict prefer not to engage in war, this weakness may provide an incentive to approach it closely anyway. A RAND Corporation monograph commissioned by the Air Force15 described the issue this way: First-strike stability is a concept that Glenn Kent and David Thaler developed in 1989 to examine the structural dynamics of mutual deterrence between two or more nuclear states.16 It is similar to crisis stability, which Charles Glaser described as ―a measure of the countries‘ incentives not to preempt in a crisis, that is, not to attack first in order to beat the attack of the enemy,‖17 except that it does not delve into the psychological factors present in specific crises. Rather, first strike stability focuses on each side‘s force posture and the balance of capabilities and vulnerabilities that could make a crisis unstable should a confrontation occur. For example, in the case of the United States, the fact that conventional weapons are so heavily dependent on vulnerable satellites may create incentives for the US to strike first terrestrially in the lead up to a confrontation, before its space-derived advantages are eroded by anti-satellite attacks.18 Indeed, any actor for which satellites or space-based weapons are an important part of its military posture, whether for support missions or on-orbit weapons, will feel “use it or lose it” pressure because of the inherent vulnerability of satellites. Short timelines and difficulty of attribution The compressed timelines characteristic of crises combine with these “use it or lose it” pressures to shrink timelines. This dynamic couples dangerously with the inherent difficulty of determining the causes of satellite degradation, whether malicious or from natural causes, in a timely way. Space is a difficult environment in which to operate. Satellites orbit amidst increasing amounts of debris. A collision with a debris object the size of a marble could be catastrophic for a satellite, but objects of that size cannot be reliably tracked. So a failure due to a collision with a small piece of untracked debris may be left open to other interpretations. Satellite electronics are also subject to high levels of damaging radiation. Because of their remoteness, satellites as a rule cannot be repaired or maintained. While on-board diagnostics and space surveillance can help the user understand what went wrong, it is difficult to have a complete picture on short timescales. Satellite failure on-orbit is a regular occurrence19 (indeed, many satellites are kept in service long past their intended lifetimes). In the past, when fewer actors had access to satellite-disrupting technologies, satellite failures were usually ascribed to “natural” causes. But increasingly, even during times of peace operators may assume malicious intent. More to the point, in a crisis when the costs of inaction may be perceived to be costly, there is an incentive to choose the worst-case interpretation of events even if the information is incomplete or inconclusive. Entanglement of strategic and tactical missions During the Cold War, nuclear and conventional arms were well separated, and escalation pathways were relatively clear. While space-based assets performed critical strategic missions, including early warning of ballistic missile launch and secure communications in a crisis, there was a relatively clear sense that these targets were off limits, as attacks could undermine nuclear deterrence. In the Strategic Arms Limitation Treaty, the US and Soviet Union pledged not to interfere with each other‘s ―national technical means‖ of verifying compliance with the agreement, yet another recognition that attacking strategically important satellites could be destabilizing.20 There was also restraint in building the hardware that could hold these assets at risk. However, where the lines between strategic satellite missions and other missions are blurred, these norms can be weakened. For example, the satellites that provide early warning of ballistic missile launch are associated with nuclear deterrent posture, but also are critical sensors for missile defenses. Strategic surveillance and missile warning satellites also support efforts to locate and destroy mobile conventional missile launchers. Interfering with an early warning sensor satellite might be intended to dissuade an adversary from using nuclear weapons first by degrading their missile defenses and thus hindering their first-strike posture. However, for a state that uses early warning satellites to enable a “hair trigger” or launch-on-attack posture, the interference with such a satellite might instead be interpreted as a precursor to a nuclear attack. It may accelerate the use of nuclear weapons rather than inhibit it. Misperception and dual-use technologies Some space technologies and activities can be used both for relatively benign purposes but also for hostile ones. It may be difficult for an actor to understand the intent behind the development, testing, use, and stockpiling of these technologies, and see threats where there are none. (Or miss a threat until it is too late.) This may start a cycle of action and reaction based on misperception. For example, relatively low-mass satellites can now maneuver autonomously and closely approach other satellites without their cooperation; this may be for peaceful purposes such as satellite maintenance or the building of complex space structures, or for more controversial reasons such as intelligence-gathering or anti-satellite attacks. Ground-based lasers can be used to dazzle the sensors of an adversary‘s remote sensing satellites, and with sufficient power, they may damage those sensors. The power needed to dazzle a satellite is low, achievable with commercially available lasers coupled to a mirror which can track the satellite. Laser ranging networks use low-powered lasers to track satellites and to monitor precisely the Earth‘s shape and gravitational field, and use similar technologies. 21 Higher-powered lasers coupled with satellite-tracking optics have fewer legitimate uses. Because midcourse missile defense systems are intended to destroy long-range ballistic missile warheads, which travel at speeds and altitudes comparable to those of satellites, such defense systems also have inherent ASAT capabilities. In fact, while the technologies being developed for long-range missile defenses might not prove very effective against ballistic missiles—for example, because of the countermeasure problems associated with midcourse missile defense— they could be far more effective against satellites. This capacity is not just theoretical. In 2007, China demonstrated a direct-ascent anti-satellite capability which could be used both in an ASAT and missile defense role, and in 2009, the United States used a ship-based missile defense interceptor to destroy a satellite, as well. US plans indicated a projected inventory of missile defense interceptors with capability to reach all low earth orbiting satellites in the dozens in the 2020s, and in the hundreds by 2030.22 Discrimination The consequences of interfering with a satellite may be vastly different depending on who is affected and how, and whether the satellite represents a legitimate military objective. However, it will not always be clear who the owners and operators of a satellite are, and users of a satellite‘s services may be numerous and not public. Registration of satellites is incomplete23 and current ownership is not necessarily updated in a readily available repository. The identification of a satellite as military or civilian may be deliberately obscured. Or its value as a military asset may change over time; for example, the share of capacity of a commercial satellite used by military customers may wax and wane. A potential adversary‘s satellite may have different or additional missions that are more vital to that adversary than an outsider may perceive. An ASAT attack that creates persistent debris could result in significant collateral damage to a wide range of other actors; unlike terrestrial attacks, these consequences are not limited geographically, and could harm other users unpredictably. In 2015, the Pentagon‘s annual wargame**,** or simulated conflict, involving space assets focused on a future regional conflict. The official report out24warnedthatit was hard to keep the conflict contained geographically when using anti-satellite weapons: As the wargame unfolded, a regional crisis quickly escalated, partly because of the interconnectedness of a multi-domain fight involving a capable adversary. The wargame participants emphasized the challenges in containing horizontal escalation once space control capabilities are employedto achieve limited national objectives. Lack of shared understanding of consequences/proportionalityStates havefairly similar understandings of the implications of military actions on the ground, in the air, and at sea,built over decades of experience. The United States and the Soviet Union/Russia have built some shared understanding of each other‘s strategic thinking on nuclear weapons, though this is less true for other states with nuclear weapons. But in the context of nuclear weapons, there is an arguable understanding about the crisis escalation based on the type of weapon (strategic or tactical) and the target (counterforce—against other nuclear targets, or countervalue—against civilian targets). Because of a lack of experience in hostilities that target space-based capabilities, it is not entirely clear what the proper response to a space activity is and where the escalation thresholds or “red lines” lie. Exacerbating this is the asymmetry in space investments; not all actors will assign the same value to a given target or same escalatory nature to different weapons.

#### Nuclear war causes extinction.

Starr ’17 (Steven; director of the University of Missouri’s Clinical Laboratory Science Program, senior scientist at the Physicians for Social Responsibility, Associate member of the Nuclear Age Peace Foundation, expert in the environmental consequences of nuclear war; 1/9/17; “Turning a Blind Eye Towards Armageddon — U.S. Leaders Reject Nuclear Winter Studies”; <https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies/>; Federation of American Scientists; accessed 11/24/18; TV) [AV]

The detonation of an atomic bomb with this explosive power will **instantly ignite fires** over a surface area of three to five square miles. In the recent studies, the scientists calculated that the **blast**, **fire**, and **radiation** from a war fought with 100 atomic bombs could produce **direct fatalities** comparable to all of those worldwide in World War II, or to those once estimated for a “**counterforce**” **nuclear war** between the superpowers. However, the **long-term environmental effects** of the war **could** significantly disrupt the global weather for at least a decade, which would likely **result in** a vast **global famine**. The scientists predicted that **nuclear firestorms** in the burning cities would cause at least five million tons of **black carbon smoke** to quickly rise above cloud level into the stratosphere, where it could not be rained out. The smoke would circle the Earth in **less than two weeks** and would form **a** global **stratospheric smoke layer** that **would remain for** more than **a decade**. The smoke would absorb warming sunlight, which would **heat the smoke** to temperatures near the boiling point of water, producing **ozone losses of** 20 to **50 percent** over populated areas. This would almost double the amount of UV-B reaching the most populated regions of the mid-latitudes, and it would create UV-B indices unprecedented in human history. In North America and Central Europe, the time required to get a painful sunburn at mid-day in June could decrease to as little as six minutes for fair-skinned individuals. As the smoke layer blocked warming sunlight from reaching the Earth’s surface, it would produce the **coldest** average **surface temperatures** in the last 1,000 years. The scientists calculated that global **food production would decrease** by 20 to **40 percent** during a five-year period following such a war. Medical experts have predicted that the shortening of growing seasons and corresponding decreases in agricultural production could cause up to **two billion** people to perish from **famine**. The climatologists also investigated the effects of a nuclear war fought with the vastly more powerful modern **thermonuclear** weapons possessed by the United States, Russia, China, France, and England. Some of the thermonuclear weapons constructed during the 1950s and 1960s were 1,000 times more powerful than an atomic bomb. During the last 30 years, the average size of thermonuclear or “strategic” nuclear weapons has decreased. Yet today, each of the approximately 3,540 strategic weapons deployed by the United States and Russia is seven to **80 times** more powerful than the atomic bombs modeled in the India-Pakistan study. The smallest strategic nuclear weapon has an explosive power of **100,000 tons of TNT**, compared to an atomic bomb with an average explosive power of 15,000 tons of TNT. Strategic nuclear weapons produce much larger nuclear firestorms than do atomic bombs. For example, a standard Russian 800-kiloton warhead, on an average day, will ignite fires covering a surface area of 90 to 152 square miles. A **war** fought with hundreds or thousands of U.S. and Russian strategic nuclear weapons would **ignite immense** **nuclear firestorms** covering land surface areas of many thousands or **tens of thousands** of square miles. The scientists calculated that these fires would produce up to **180 million tons** of black carbon soot and **smoke**, which would form a dense, **global stratospheric smoke layer**. The smoke would remain in the stratosphere for 10 to **20 years**, and it **would block** as much as **70 percent of sunlight** from reaching the surface of the Northern Hemisphere and 35 percent from the Southern Hemisphere. So much sunlight would be blocked by the smoke that the noonday sun would resemble a full moon at midnight. Under such conditions, it would only require a matter of days or weeks for daily minimum **temperatures** to **fall below freezing** in the largest agricultural areas of the Northern Hemisphere, where freezing temperatures would occur every day for a period of between one to more than two years. Average surface temperatures would become colder than those experienced 18,000 years ago at the height of the last Ice Age, and the prolonged cold would cause average rainfall to decrease by up to 90%. Growing seasons would be completely eliminated for more than a decade; it would be **too cold and dark** to grow food crops, **which would doom the** majority of the **human population.** NUCLEAR WINTER IN BRIEF The profound cold and darkness following nuclear war became known as nuclear winter and was first predicted in 1983 by a group of NASA scientists led by Carl Sagan. During the mid-1980s, a large body of research was done by such groups as the Scientific Committee on Problems of the Environment (SCOPE), the World Meteorological Organization, and the U.S. National Research Council of the U.S. National Academy of Sciences; their work essentially supported the initial findings of the 1983 studies. The idea of nuclear winter, published and supported by prominent scientists, generated extensive public alarm and put political pressure on the United States and Soviet Union to reverse a runaway nuclear arms race, which, by 1986, had created a global nuclear arsenal of more than 65,000 nuclear weapons. Unfortunately, this created a backlash among many powerful military and industrial interests, who undertook an extensive media campaign to brand nuclear winter as “bad science” and the scientists who discovered it as “irresponsible.” Critics used various uncertainties in the studies and the first climate models (which are primitive by today’s standards) as a basis to criticize and reject the concept of nuclear winter. In 1986, the Council on Foreign Relations published an article by scientists from the National Center for Atmospheric Research, who predicted drops in global cooling about half as large as those first predicted by the 1983 studies and described this as a “nuclear autumn.”

#### Extinction isn’t white paranoia and apocalyptic reps are good

**Thompson 18** [Nicole Akoukou. Chicago-based creative writer. 4-6-2018. "Why I will not allow the fear of a nuclear attack to be white-washed." RaceBaitR. http://racebaitr.com/2018/04/06/2087/#]

**I couldn’t spare empathy for a white** woman **whose biggest fear was something that hadn’t happened yet and might not. Meanwhile, my most significant fears were in motion**: **women and men dying in cells** after being wrongly imprisoned, **choked out for peddling cigarettes, or shot to death** during ‘routine’ traffic stops. I twitch when my partner is late, worried that a cantankerous cop has brutalized or shot him because he wouldn’t prostrate himself. **As a woman of color, I am aware of** the **multiple types of violence that threaten me currently—not theoretically. Street harassment**, excessively affecting me as a Black woman, has blindsided me since I was eleven. A premature body meant **being** **catcalled** before I’d discussed the birds and the bees. It meant being **followed, whistled at, or groped**. As an adult, while navigating through neighborhoods with extinguished street lights, I noticed the correlation between women’s safety and street lighting—as well as the fact that Black and brown neighborhoods were never as brightly lit as those with a more significant white population. I move quickly through those unlit spaces, never comforted by the inevitable whirl of red and blue sirens. In fact, it’s always been the contrary. Ever so often, cops approach me in their vehicle’s encouraging me to “Hurry along,” “Stay on the sidewalk,” or “Have a good night.” My spine stiffening, I never believed they endorsed my safety. Instead, I worried that I’d be accused of an unnamed accusation, corned by a cop who preys on Black women, or worse. A majority of my 50-minute bus ride from the southside of Chicago to the north to join these women for the birthday celebration was spent reading articles about citywide shootings. I began with a Chicago Tribute piece titled “33 people shot, seven fatally, in 13 hours,” then toppled into a barrage of RIP posts on Facebook and ended with angry posts about police brutality on Tumblr. You might guess, by the time I arrived to dinner I wasn’t in the mood for the “I can’t believe we’re all going to die because Trump is an idiot” shit. I shook my head, willing the meal to be over, and was grateful when the check arrived just as someone was asking me about my hair. My thinking wasn’t all too different from Michael Harriot’s ‘Why Black America Isn’t Worried About the Upcoming Nuclear Holocaust.” While the meal was partly pleasant, **I departed thinking, “fear of nuclear demolition is just some white shit**.” Sadly, that thought would not last long. **I still vibe with Harriot’s statement, “Black people have lived under the specter of having our existence erased on a white man’s whim since we stepped on**to the **shore** at Jamestown Landing.” **However**, a friend—a Black friend—ignited my nuclear paranoia by sharing theories about when it might happen and who faced the greatest threat. In an attempt to ease my friend’s fear, I leaned in to listen but accidentally toppled down the rabbit hole too. I forked through curated news feeds. I sifted through “fake news,” “actual news,” and foreign news sources. Suddenly, an idea took root: **nuclear strike would disproportionately impact Black people, brown people, and low-income individuals. North Korea won’t target the plain sight racists of Portland**, Oregon, **the violently microaggressive liberals of the rural Northwest, or the white-hooded klansmen** **of** Diamondhead, **Mississippi. No, under the instruction of the supreme leader Kim Jong-un, North Korea will likely strike densely populated urban areas**, such as Los Angeles, Chicago, Washington D.C., and New York City. **These locations stand-out as targets for a nuclear strike because they are densely populated** U.S. population centers. **Attacking the heart of the nation or populous cities would translate to more casualties**. With that in mind, it’s not lost on me that **the most populous cities in the United States boast sizeable diverse populations, or more plainly put: Black populations.** This shit stresses me out! There’s a creeping chill that follows me, a silent alarm that rings each time my Google alert chimes letting me know that Donald Trump has yet again provoked Kim Jong-Un, a man who allegedly killed his very own uncle. I’ve grown so pressed by the idea of nuclear holocaust that my partner and I started gathering non-perishables, candlesticks, a hand-crank radio, and other must-buy items that can be banked in a shopping cart. **The practice of preparing for a nuclear holocaust sometimes feels comical, particularly when acknowledging that there has long been a war on Black people in this country**. Blackness is bittersweet in flavor. We are blessed with the melanized skin, the MacGyver-like inventiveness of our foremothers, and our blinding brightness—but the anti-blackness that we experience is also blinding as well as stifling. We are stuck by rigged systems, punished with the prison industrial complex, housing discrimination, pay discrimination, and worse. We get side-eyes from strangers when we’re “loitering,” and the police will pull us over for driving “too fast” in a residential neighborhood. We get murdered for holding cell phones while standing in our grandmother’s backyard. The racism that strung up our ancestors, kept them sequestered to the back of the bus and kept them in separate and unequal schools still lives. It lives, and it’s more palpable than dormant. To me, this means one thing: Trump’s America isn’t an unfortunate circumstance, it’s a homecoming event that’s hundreds of years in the making, no matter how many times my white friends’ say, “He’s not my president.” **In light of this homecoming, we now flirt with a new, larger fear of a Black genocide**. **America has always worked towards Black eradication through a steady stream of life-threatening inequality, but nuclear war on American soil would be swift**. And **for this reason I’ve grown tired of whiteness** **being at the center of the nuclear conversation. The race-neutral approach to the dialogue, and a tendency to continue to promote the idea that missiles will land in suburban and rural backyards, instead of inner-city playgrounds, is false.** “The Day After,” the iconic, highest-rated television film in history, aired November 20, 1983. More than 100 million people tuned in to watch a film postulating a war between the Soviet Union and the United States. The film, which would go on to affect President Ronald Reagan and policymakers’ nuclear intentions, shows the “true effects of nuclear war on average American citizens.” The Soviet-targeted areas featured in the film include Higginsville, Kansas City, Sedalia, Missouri, as well as El Dorado Springs, Missouri. They depict the destruction of the central United States, and viewers watch as full-scale nuclear war transforms middle America into a burned wasteland. Yet unsurprisingly, the **devastation from the attack is completely white-washed, leaving out the more likely victims which are the more densely populated (Black) areas**. **Death tolls would be high for white populations, yes, but large-scale losses of Black and brown folks would outpace that number, due to placement and poverty. That number would be pushed higher by limited access to premium health care, wealth, and resources. The effects of radiation sickness, burns, compounded injuries, and malnutrition would throttle Black and brown communities and would mark us for generations. It’s for that reason that we have to do more to foster** disaster **preparedness among Black people where we can. Black people deserve the space to explore nuclear unease, even if we have competing threats, anxieties**, and worries. Jacqui Patterson, Director of the Environmental and Climate Justice Initiative, once stated: African American communities are disproportionately vulnerable to and impacted by natural (and unnatural) catastrophes. Our socio-economic vulnerability is based on multiple factors including our lack of wealth to cushion us, our disproportionate representation in lower quality housing stock, and our relative lack of mobility, etc.

## Framin

**The standard is maximizing expected wellbeing, or utilitarianism**

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

**2] Default to util if there’s any uncertainty**

Walter **Sinnott-Armstrong 14** [American philosopher. He specializes in ethics, epistemology, and more recently in neuroethics, the philosophy of law, and the philosophy of cognitive science], "Consequentialism", The Stanford Encyclopedia of Philosophy (Spring 2014 Edition), Edward N. Zalta (ed), BE

Even if consequentialists can accommodate or explain away common moral intuitions, that might seem only to answer objections without yet giving any positive reason to accept consequentialism. However, **most people begin with the presumption that we morally ought to make the world better when we can. The question then is only whether any moral constraints or moral options need to be added to the basic consequentialist factor in moral reasoning.** (Kagan 1989, 1998) If no objection reveals any need for anything beyond consequences, then consequences alone seem to determine what is morally right or wrong, just as consequentialists claim.

#### 3] Extinction comes first under any framework

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

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

## UV

#### The 1AC isn’t reformism – it doesn’t conflate change with progress or validate legal institutions – it’s a tactical intervention that reduces violence while exposing the contradictions within law.

**Spade 13** Dean Spade, associate professor of law @ Seattle University, “Intersectional Resistance and Law Reform” *Signs* Vol. 38, No. 4, Summer 2013

What intersectional politics demands¶ **Social movements using critical intersectional tools are making demands that are often difficult for legal scholars to comprehend because of the ways that they** **throw US law** and the nation-state form **into crisis**. **Because they recognize** the fact **that legal equality** **contains and neutralizes resistance and perpetuates intersectional violence and because they identify purportedly neutral administrative systems as key vectors of that violence,** critical scholars and activists are making demands that include ending immigration enforcement and abolishing policing and prisons. These demands suggest that the technologies of gendered racialization that form the nation cannot be reformed into fair and neutral systems. These systems are technologies of racialized-gendered population control that cannot operate otherwise—they are built to extinguish perceived threats and drains in order to protect and enhance the livelihood of the national population. **These kinds of demands and the analysis they represent produce a different relation to law reform strategies than the national narrative about law reform** suggests, **and** different than what is often assumed by legal scholars interested in the field of “**equality** law.” Because **legal equality “victories” are being exposed as primarily symbolic declarations** that stabilize the status quo of **violence**, declarations from courts or legislatures become undesirable goals. **Instead, law reform, in this view, might be used as a tactic of transformation focused on interventions that materially reduce violence or maldistribution without inadvertently expanding harmful systems in the name of reform**. **One recent example is the campaign against gang injunctions in Oakland**, California. A broad coalition—comprising organizations focused on police violence, economic justice, imprisonment, youth development, immigration, gentrification, and violence against queer and trans people—**succeeded** in recent years in bringing significant attention to the efforts of John Russo, Oakland’s city attorney, to introduce gang injunctions (Critical Resistance 2011). The organizations in this coalition are prioritizing anticriminalization work that might usually be cast as irrelevant or marginal to organizations focused on the single axis of women’s or LGBT equality. The campaign has a law reform target in that it seeks to prevent the enactment of certain law enforcement mechanisms that are harmful to vulnerable communities. However, it is not a legal-equality campaign. Rather than aiming to change a law or policy that explicitly excludes a category of people, it aims to expose the fact that a facially neutral policy is administered in a racially targeted manner (Davis 2011; Stop the Injunctions 2011).¶ **Furthermore, the coalition frames its campaign within a larger set of demands not limited to what can be won within the current structure of American law but focused on population-level conditions of maldistribution.** **The demands** of the coalition **include stopping all gang injunctions and police violence; putting resources toward reentry support and services for people returning from prison, including fully funded and immediate access to identity documents, housing, job training, drug and alcohol treatment, and education; banning employers from asking about prior convictions on job applications; ending curfews for people on parole and probation; repealing California’s three-strikes law; reallocating funds from prison construction to education; ending all collaborations between Oakland’s government and** Immigration and Customs Enforcement (**ICE**); **providing affordable and low-income housing**; making Oakland’s Planning Commission accountable regarding environmental impacts of development; ending gentrification; and increasing the accountability of Oakland’s city government while augmenting decision-making power for Oakland residents (Stop the Injunctions 2011). These demands evince an analysis of conditions facing vulnerable communities in Oakland (and beyond) that cannot be resolved solely through legal reform since they include the significant harm inflicted when administrative bodies like ICE and the Planning Commission implement violent programs under the guise of neutral rationales. These demands also demonstrate an intersectional analysis of harm and refuse logics of deservingness that have pushed many social movements to distance themselves from criminalized populations. Instead, people caught up in criminal and immigration systems are portrayed as those in need of resources and support, and the national fervor for law and order that has gripped the country for decades, emptying public coffers and expanding imprisonment, is criticized.¶ **Another example of intersectional activism utilizing law reform without falling into the traps of legal equality is activism against the immigration enforcement program Secure Communities. Secure Communities is a federal program in which participating jurisdictions submit the fingerprints of arrestees to federal databases for an immigration check**. As of October 2010, 686 jurisdictions in thirty-three states were participating.12 **Diverse coalitions of activists and organizations around the U**nited **S**tates **launched organizing campaigns to push their jurisdictions to refuse to participate**. Organizations focused on domestic violence, trans and queer issues, racial and economic justice, and police accountability, along with many others, have joined this effort and committed resources to stopping the devolution of criminal and immigration enforcement. **Their advocacy has rejected deservingness narratives that push the conversation toward reform for “good, noncriminal” immigrants**. **These advocates have won significant victories, convincing** certain **jurisdictions to refuse to participate and increasing understanding of the intersecting violences of criminal punishment and immigration enforcement**.13 This work also avoids the danger of expanding and legitimizing harmful systems that other legal reform work can present. It is focused on reducing, dismantling, and preventing the expansion of harmful systems.14¶ I offer these examples not because they are perfect—certainly a significant range of tactics and strategies are part of each of these campaigns, and, with detailed analysis, we might find instances of co-optation, deservingness divides, and other dangers of legal reform work occurring even as some are avoided and rejected. However, these examples are indicative of resistance to limitations of legal equality or rights strategies. These demands exceed what the law recognizes as viable claims. These campaigns suggest that those who argue that a politics based on intersectional analysis is too broad, idealistic, complex, or impossible—or that it eliminates effective immediate avenues for resistance—are mistaken. Critical political engagements are resisting the pitfalls of rights discourse and seeking to build broad-based resistance formations made up of constituencies that come from a variety of vulnerable subpopulations but find common cause in concerns about criminalization, immigration, poverty, colonialism, militarism, and other urgent conditions. **Their targets are administrative systems and law enforcement mechanisms that are nodes of distribution for racialized-gendered harm and violence, and their tactics seek material change in the lives of vulnerable populations rather than recognition and formal inclusion.** Their organizing methods mobilize directly affected communities and value horizontal structures, leadership development, mutual aid, democratic participation, and community solutions rather than top-down, elite-imposed approaches to political transformation. These analytical and practical methods owe a great deal to women-of-color feminist formations that have innovated and continue to lead inquiry and experimentation into transformative social justice theory and practice.15

#### Policy debate is cool even though, and get this, voting aff doesn’t cause the plan IRL.

John **Hird 17**. Dean of the College of Social and Behavioral Sciences and Professor of Political Science and Public Policy, University of Massachusetts Amherst. “How Effective is Policy Analysis,” in D. Weimer & L. S. Friedman (eds.) *Does Policy Analysis Matter? Exploring Its Effectiveness in Theory and Practice*. University of California Press. 44-76.

Classical policy analysis, however absent from actual policy making, remains an important vehicle for teaching policy analysts the connections between their analysis and the policymaking world in which their recommendations would live. **Even if it implies more power than analysts will ever have, classical policy analysis teaches that politics, law, implementation, social structures, organizational behavior, and other factors are critical to policy outcomes and must play key roles in thinking through possible ways to address policy problems**. **Bringing policy ideas to fruition, bridging the worlds of research and policy making, is a critical skill**

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