## 1

#### Private sector innovation in the commercial space industry is high and rising.

**Smith 18** [Matthew Smith, 6-11-2018, "Commercialized Space and You," Science in the News, https://sitn.hms.harvard.edu/flash/2018/commercialized-space-and-you/]//DDPT

Step aside, NASA. The 20th century model of space exploration is running out of fuel, and private companies are now leading the race for human expansion across the galaxy. Elon Musk, Richard Branson, and Jeff Bezos are three of the billionaires leading this extraterrestrial adventure with their respective companies, SpaceX, Virgin Galactic, and Blue Origin. Bezos, the founder of Amazon and currently the wealthiest person in the world, has a vision of sending autonomous rovers to the Moon and helping to eventually create a Moon Village. He has explained that collaborations with the National Aeronautics and Space Administration (NASA) and other government agencies are encouraged and appreciated, but are no longer essential to achieve his goal. [Musk](https://www.geekwire.com/2018/jeff-bezos-blue-origin-space-venture-go-moon-settlements/), who co-founded Tesla, has already launched nine rockets within the first five months of 2018, one of which was the most powerful private spacecraft [ever sent into orbit](http://sitn.hms.harvard.edu/flash/2018/spacex-launches-falcon-heavy-rocket-successfully/). Looking forward, SpaceX aims to complete its first manned mission to Mars in 2024, almost a decade earlier than NASA’s projections. Even the current US president is encouraging this shift to private companies driving [innovation in space](https://www.washingtonpost.com/news/the-switch/wp/2018/02/11/the-trump-administration-wants-to-turn-the-international-space-station-into-a-commercially-run-venture/?noredirect=on&utm_term=.d2c1eccab4ca). With almost [$1 billion](https://www.forbes.com/sites/alexknapp/2018/04/10/nearly-1-billion-was-invested-in-space-startups-in-1q2018-new-report-says/#5fdd019b285c) invested in space-focused startups in the first quarter of 2018, the commercialized space industry shows no sign of slowing down.

#### There is a massive flood of investment pouring into the commercial space sector because of a signal of stable large company support AND lack of government interference – plan reverses that

Wharton 19 (Wharton Editorial Board of University of Pennsylvania, business analysis journal online run through U Penn, "Why Big Business Is Making a Giant Leap Into Space," 6/4/2019 <https://knowledge.wharton.upenn.edu/article/commercial-space-economy/> DD)

For decades, relatively easy access to space and the big profits to go with it have dangled elusively just over the horizon. With a little more R&D money and a few more advances in the technology, the thinking went, space would be ours. Are we there yet? More than a few signs are pointing in the direction of a robust, varied space age of viable commercialization — as well as more audacious goals than we’ve seen in generations. On the practical side, advances in reusable rockets, lowered per-launch costs and miniaturization of satellites are opening up business opportunities well beyond aerospace and defense, and into IT hardware and telecom, according to Morgan Stanley. The global space industry is expected to generate revenue of $1.1 trillion or more in 2040, up from the current $350 billion, according to a recent report by the firm. On the dream side, Amazon founder Jeff Bezos recently outlined a long-term vision for putting a trillion people in space colonies with one small step coming soon: an infrastructure starting with lunar lander Blue Moon. “We are going to build a road to space,” Bezos said at a May unveiling of his plans, “and then amazing things will happen.” Amazing things already are. One indication that big business is taking space more seriously is that interest has moved from the fringe to the mainstream, says Wharton management professor Anoop Menon. While space retains an undeniably speculative aspect, especially around development of business models, a number of factors are coming together now to suggest that big business’s foray into space is here. “I don’t think we are necessarily a long way away — it’s a matter of being creative,” said Menon, co-author with Laura Huang and Tiona Zuzul of “Watershed Moments, Cognitive Discontinuities, and Entrepreneurial Entry: The Case of New Space.” Satellites that capture geospatial data are potentially quite lucrative, he says, tracking shipping movements, deforestation or the location of mining deposits. “This is an interesting one,” says Menon of another idea: “Taking pictures of parking lots at Wal-Mart and Target and selling that to hedge funds, since traffic is a pretty good leading indicator of economic activity.” A sustainable business model for many is clearly the goal. For others, though, sustaining losses is a small price to pay for the pursuit of something larger and potentially more meaningful. Bezos, for instance, has said he is willing to sell a billion dollars of Amazon stock per year in exchange for adventure and knowledge in space. Says Nicolaj Siggelkow, Wharton management professor and co-director of the Mack Institute for Innovation Management: “The main driver for these people I think is much more an aspirational goal. Here we are clinging to this speck of dust moving through the universe and there is this idea that we might be able to escape that. That is ultimately what drives their wanting to succeed.” Space: Province of Billionaires Three individualistic billionaires — Bezos, Elon Musk and Richard Branson — have increasingly turned their attention in the last two decades to space, which is defined by NASA and other Earthlings as beginning at 50 miles above sea level. Last month, Musk’s SpaceX launched a rocket that released 60 500-pound satellites into orbit. SpaceX intends to launch others, creating Starlink, a web of satellites supporting a global internet service. “This ‘data-driven’ aspect when coupled with the rest of the space-industry ecosystem could make it more robust.”–Anoop Menon Thousands more satellites are being readied. Telesat LEO (low-earth orbit) will launch a “constellation of highly advanced satellites [to] seamlessly integrate with terrestrial networks,” trumpets the company’s promotional literature. “The global network will deliver fiber quality throughput anywhere on earth.” A partnership of OneWeb Satellites and Airbus will begin launching 900 satellites into low orbit in 2019 to deliver affordable global internet access. Amazon’s Project Kuiper will place 3,236 satellites into orbit with the stated intention of providing “low-latency, high-speed broadband connectivity to unserved and underserved communities around the world,” Amazon said in a statement to GeekWire. “Data is everything these days,” says Menon. “There are data companies whose business models are about processing the data that comes out of the satellites, and there is this whole set of companies coming up around this idea,” which is one reason he believes that the new space race is here to stay. “This ‘data-driven’ aspect when coupled with the rest of the space-industry ecosystem could make it more robust.” Back on Earth, demand for data only promises to increase with the proliferation of AI, development of self-driving vehicles, virtual reality and video. At the same time, costs for commercial applications are dropping for just about everything — hardware components, software development — enabled by using commercial technology and standard architectures, says Ellen Chang, co-founder of LightSpeed Innovations. “When costs have dropped by about 60% to 80% in whatever industry, I would say you have an opportunity. It started with the inception of the CubeSat, when different commercial off-the-shelf components were used instead of space-qualified components. Over time, more and more engineers adopted the form factor.” “Here we are clinging to this speck of dust moving through the universe and there is this idea that we might be able to escape that. That is ultimately what drives their wanting to succeed.”–Nicolaj Siggelkow Recently, the cost of launching a satellite has declined to about $60 million from $200 million because of reusable rockets, reports Morgan Stanley, with a potential drop to as low as $5 million. Satellite mass production could decrease the cost from $500 million per satellite to $500,000. But more data and better internet service are just the beginning. Companies like Bigelow Aerospace are developing orbital space stations. Axiom Space has staked out plans to build the first international commercial space station — with a Philippe Starck-designed interior — that aims to be a “microgravity laboratory where educators, scientists and researchers conduct life-improving research.” Other firms are chasing space tourism or mining asteroids for rare minerals. Morgan Stanley notes that privately held space exploration firms are pursuing goals like landing humans on the moon, as well as airplane-borne rocket launchers that could put small telecommunications satellites into low Earth orbit at a far lower cost, and with far greater responsiveness, than ground-based systems. “It used to be a space race between countries, and now it’s a space race between billionaires,” says Menon. “Musk is running SpaceX with the goal of colonizing Mars and making humanity a multi-planetary species. Bezos, with all of the might of Amazon behind him, is doing it with Blue Origin. He sees it very differently, a space-based civilization rather than colonizing planets, building space stations, and moving heavy industry off-planet, and he is slowly building the pieces for it.” “These far-out ideas — ‘let’s mine water on the moon, let’s build these big colonies out there’ — that to me I find fascinating and inspirational and aspirational,” says Siggelkow. “And I think that is what allows these firms to attract really good people. It is really cool to be working on something amazing, it’s how you attract great talent. Whether these big projects will become commercially attractive and at what point is another question, but that might be secondary to most people working on these projects.” “It used to be a space race between countries, and now it’s a space race between billionaires.”–Anoop Menon There are other reasons for pushing ahead with ideas that may seem pie-in-the-sky, says Wharton management professor David Hsu. “It’s like Google funding big science projects and trying to push the technology frontier,” he says. “That has a signaling purpose in the marketplace — ‘we may be making 99% of our money from your searches, but we are thinking about the future and pushing the frontier a bit.’ They are really trying to work on the harder problems, and maybe we haven’t thought of all of the uses for a particular technology in all cases. They are on the road toward that. You want to be able to show technological things that people didn’t necessarily understand were feasible or possible.” A certain amount of momentum for ideas hinges on perception, especially regarding a future for the space-tourism industry, Siggelkow notes. “We know this is a really complicated and to a certain extent dangerous endeavor, and the general public’s risk appetite is very low. Think about self-driving vehicles and accidents. At what point do we feel they are safe? There is something similar here. If something happens, I am afraid it will slow down space tourism quite a bit.” Branson’s Virgin Galactic has already suffered a visible tragedy. One pilot was killed and another injured in 2014 when experimental spaceflight vehicle VSS Enterprise broke up during a test flight and crashed in the Mojave Desert. Several other initiatives have failed, such as Israel’s Beresheet Spacecraft, which in April crashed into the moon. For now, investors are taking a relatively rosy view of the prospect of making money in space. In the first quarter of 2019, $1.7 billion in equity was invested into space companies — nearly the double the amount invested in the last quarter of 2018, according to Space Investment Quarterly, published by Space Angels. Total funding since 2009 exceeds $20 billion invested in 435 companies, the space-centric financial services firm says. “With SpaceX, Boeing, Virgin Galactic, and Blue Origin all inching closer to making history as the first privately funded companies to launch commercial passengers into space, we believe that 2019 will most certainly be the Year of Commercial Space Travel,” the report said. Rekindled Ambition In terms of the march of progress, mindset matters. In their research paper, Menon and his co-authors proposed that the New Space market was catalyzed by a set of “emotionally resonant” events. These moments — events like the 2003 Space Shuttle Columbia disaster, or when SpaceShipOne in 2004 became the first privately developed spacecraft to take a pilot into space twice within a two-week period — challenged or reinforced existing notions, and led to new solutions. “This, in turn, drove the emergence of a previously unimaginable market in aerospace,” they wrote. “It’s really relevant with the 50th anniversary of Apollo 11 to remember that it’s not easy to throw some resources at a problem and expect that it’s a given you will have success.”–David Hsu Menon says what while momentum lagged in recent years, the pace has now picked up — at NASA as well as in other countries. “The European Space Agency was in crisis mode because of the launch cost savings Musk achieved and the market share he was able to carve out so rapidly. In England, there is Reaction Engines. They have a very interesting concept, the Skylon Spaceplane, a single-stage-to-orbit plane that goes to space directly. India is interesting because they’ve been able to do a fair bit on a much lower budget. They got to Mars at a fraction of the price it took us to get there. The Chinese space program is a big part of their national prestige right now.”

#### Without that mass investment, all necessary space infrastructure is chilled – technology is all seen as linked to eventual deep space exploration

Sommariva 20 (Andrea, Italian Institute for International Political Studies, "The Evolution of Space Economy: The Role of the Private Sector and the Challenges for Europe," 12/11, <https://www.ispionline.it/en/pubblicazione/evolution-space-economy-role-private-sector-and-challenges-europe-28604> DD)

The second factor focuses on spacecraft and space-access costs. NASA has moved from a government-run International Space Station access system to one where the transportation of goods and people relies on private companies, obviously under contract and control of NASA, thus eliminating the monopoly of Lockheed Martin and Boeing. As a result, significant progress has been made in the design and development of cost-effective launch vehicles. Currently, SpaceX has developed a system to reuse the first stage of rockets, which serves to give the initial thrust necessary to overcome Earth's atmosphere. Normally, after doing its job, the first stage came off and fell into the ocean as waste. SpaceX has successfully developed the recovery and reuse of the first stages of rockets, reducing the cost per kilogram of payload by more than 50 percent. These developments provide access to space for many small and medium-sized companies, as well as educational and research institutions. In the near future, the development of the satellite Internet will allow people and companies to connect wherever they are - an effective alternative when terrestrial networks are absent or of poor quality. In addition, satellite technology gives rise to a growing stream of uses, including transportation and logistics efficiency, natural resource management, precision agriculture, environment and climate change monitoring, and makes it a potential source of economic growth, social well-being, and sustainable development. As for the exploration programs, the return to the Moon is now days on the agendas of the major space agencies, such as NASA and ESA. Over the next ten to fifteen years, the use of space resources will be crucial for the success of expeditions to the Moon and other planets. The Moon's resources provide propellant for the in-orbit refueling of spacecraft, reducing their costs[1], and oxygen and water for support systems of the future space station around the Moon (the Gateway project). A new form of public-private partnership is rising, a partnership in which governments will provide initial support in the exploration and the advancement of critical technologies (telecommunications and Moon-Earth navigation), and in the construction of space infrastructure. NASA plans a first exploration mission at the South Pole of the Moon in 2024. The private sector would then take the lead in creating new markets and expanding the presence of humanity in space. SpaceX is developing a vehicle, Starship, for missions to the Moon and beyond. The Starship is a fully reusable launch vehicle. It consists of two stages, the booster and the spacecraft, which in November 2018 Elon Musk renamed Super Heavy and Starship respectively. The overall vehicle architecture includes both the launcher and the vehicle, as well as the infrastructure for the first and subsequent launches, and zero-gravity propellant transfer’s technology. The spacecraft alone is designed to be used, in a first phase, without a booster for both freight and passenger transport. In April 2020, NASA selected a modified version of the Starship as one of three landing systems for the Artemis Program. Moon mining will present also an opportunity to make space based solar power (SBSP) economically feasible. SBSP has been studied for decades. However, the costs of launching such large infrastructure from Earth to geosynchronous orbit (GEO) make these projects economically not feasible. At the SEE Lab-SDA Bocconi, we have initiated a study where the basic idea is to build the SBSP satellite with material from the Moon and to transfer the components to GEO where they would be assembled. Its costs are comparable to a large-scale nuclear power plant. If preliminary results are confirmed by the completion of the study, space based solar power can transform the energy markets of Earth[2], and can give an important contribution to the climate change’s mitigation.

#### Strong commercial space industry catalyzes tech innovation – progress at the margins and spinoff tech change global information networks.

**Hampson 17** [Joshua Hampson, 1-27-2017, "The Future of Space Commercialization," Niskanen Center, <https://www.niskanencenter.org/wp-content/uploads/old_uploads/2017/01/TheFutureofSpaceCommercializationFinal.pdf>]//DDPT

Innovation is generally hard to predict; some new technologies seem to come out of nowhere and others only take off when paired with a new application. It is difficult to predict the future, but it is reasonable to expect that a growing space economy would open opportunities for technological and organizational innovation.

In terms of technology, the difficult environment of outer space helps incentivize progress along the margins. Because each object launched into orbit costs a significant amount of money—at the moment between $27,000 and $43,000 per pound, though that will likely drop in the future —each 19 reduction in payload size saves money or means more can be launched. At the same time, the ability to fit more capability into a smaller satellite opens outer space to actors that previously were priced out of the market. This is one of the reasons why small, affordable satellites are increasingly pursued by companies or organizations that cannot afford to launch larger traditional satellites. These small 20 satellites also provide non-traditional launchers, such as engineering students or prototypers, the opportunity to learn about satellite production and test new technologies before working on a full-sized satellite. That expansion of developers, experimenters, and testers cannot but help increase innovation opportunities.

Technological developments from outer space have been applied to terrestrial life since the earliest days of space exploration. The National Aeronautics and Space Administration (NASA) maintains a website that lists technologies that have spun off from such research projects. Lightweight 21 nanotubes, useful in protecting astronauts during space exploration, are now being tested for applications in emergency response gear and electrical insulation. The need for certainty about the resiliency of materials used in space led to the development of an analytics tool useful across a range of industries. Temper foam, the material used in memory-foam pillows, was developed for NASA for seat covers. As more companies pursue their own space goals, more innovations will likely come from the commercial sector.

Outer space is not just a catalyst for technological development. Satellite constellations and their unique line-of-sight vantage point can provide new perspectives to old industries. Deploying satellites into low-Earth orbit, as Facebook wants to do, can connect large, previously-unreached swathes of 22 humanity to the Internet. Remote sensing technology could change how whole industries operate, such as crop monitoring, herd management, crisis response, and land evaluation, among others. 23 While satellites cannot provide all essential information for some of these industries, they can fill in some useful gaps and work as part of a wider system of tools. Space infrastructure, in helping to change how people connect and perceive Earth, could help spark innovations on the ground as well. These innovations, changes to global networks, and new opportunities could lead to wider economic growth.

#### Tech innovation solves every existential threat – cumulative extinction events outweigh the aff

**Matthews 18** [Dylan Matthews, 10-26-2018, "How to help people millions of years from now," Vox, <https://www.vox.com/future-perfect/2018/10/26/18023366/far-future-effective-altruism-existential-risk-doing-good>]

If you care about improving human lives, you should overwhelmingly care about those quadrillions of lives rather than the comparatively small number of people alive today. The 7.6 billion people now living, after all, amount to less than 0.003 percent of the population that will live in the future. It’s reasonable to suggest that those quadrillions of future people have, accordingly, hundreds of thousands of times more moral weight than those of us living here today do.

That’s the basic argument behind Nick Beckstead’s 2013 Rutgers philosophy dissertation, “[On the overwhelming importance of shaping the far future](https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxuYmVja3N0ZWFkfGd4OjExNDBjZTcwNjMxMzRmZGE).” It’s a glorious mindfuck of a thesis, not least because Beckstead shows very convincingly that this is a conclusion any plausible moral view would reach. It’s not just something that [weird utilitarians](https://plato.stanford.edu/entries/consequentialism/) have to deal with.

And Beckstead, to his considerable credit, walks the walk on this. He works at the Open Philanthropy Project on grants relating to the far future and runs a [charitable fund](https://app.effectivealtruism.org/funds/far-future) for donors who want to prioritize the far future. And arguments from him and others have turned “long-termism” into a very vibrant, important strand of the effective altruism community.

But what does prioritizing the far future even mean?

The most literal thing it could mean is preventing human extinction, to ensure that the species persists as long as possible. For the long-term-focused effective altruists I know, that typically means identifying concrete threats to humanity’s continued existence — like unfriendly artificial intelligence, or a [pandemic](https://www.vox.com/future-perfect/2018/10/15/17948062/pandemic-flu-ebola-h1n1-outbreak-infectious-disease), or global warming/out of control geoengineering — and engaging in activities to prevent that specific eventuality.

But in a [set of slides](https://intelligence.org/wp-content/uploads/2013/07/Beckstead-Evaluating-Options-Using-Far-Future-Standards.pdf) he made in 2013, Beckstead makes a compelling case that while that’s certainly part of what caring about the far future entails, approaches that address specific threats to humanity (which he calls “targeted” approaches to the far future) have to complement “broad” approaches, where instead of trying to predict what’s going to kill us all, you just generally try to keep civilization running as best it can, so that it is, as a whole, well-equipped to deal with potential extinction events in the future, not just in 2030 or 2040 but in 3500 or 95000 or even 37 million.

In other words, caring about the far future doesn’t mean just paying attention to low-probability risks of total annihilation; it also means acting on pressing needs now.

For example: We’re going to be better prepared to prevent extinction from AI or a supervirus or global warming if society as a whole makes a lot of scientific progress. And a significant bottleneck there is that the vast majority of humanity doesn’t get high-enough-quality education to engage in scientific research, if they want to, which reduces the odds that we have enough trained scientists to come up with the breakthroughs we need as a civilization to survive and thrive.

So maybe one of the best things we can do for the far future is to improve school systems — here and now — to harness the group economist Raj Chetty calls [“lost Einsteins”](https://www.nytimes.com/2017/12/03/opinion/lost-einsteins-innovation-inequality.html) (potential innovators who are thwarted by poverty and inequality in rich countries) and, more importantly, the hundreds of millions of kids in developing countries dealing with even worse education systems than those in depressed communities in the rich world.

What if living ethically for the far future means living ethically now?

Beckstead mentions some other broad, or very broad, ideas (these are all his descriptions):

Help make computers faster so that people everywhere can work more efficiently

Change intellectual property law so that technological innovation can happen more quickly

Advocate for open borders so that people from poorly governed countries can move to better-governed countries and be more productive

Meta-research: improve incentives and norms in academic work to better advance human knowledge

Improve education

Advocate for political party X to make future people have values more like political party X

”If you look at these areas (economic growth and technological progress, access to information, individual capability, social coordination, motives) a lot of everyday good works contribute,” Beckstead writes. “An implication of this is that a lot of everyday good works are good from a broad perspective, even though hardly anyone thinks explicitly in terms of far future standards.”

Look at those examples again: It’s just a list of what normal altruistically motivated people, not effective altruism folks, generally do. Charities in the US love talking about the lost opportunities for innovation that poverty creates. Lots of smart people who want to make a difference become scientists, or try to work as teachers or on improving education policy, and lord knows there are plenty of people who become political party operatives out of a conviction that the moral consequences of the party’s platform are good.

All of which is to say: Maybe effective altruists aren’t that special, or at least maybe we don’t have access to that many specific and weird conclusions about how best to help the world. If the far future is what matters, and generally trying to make the world work better is among the best ways to help the far future, then effective altruism just becomes plain ol’ do-goodery.\*

## 2

#### Counterplan: States ought to establish a governing authority to distribute property to private entities as outlined in Babcock 21.

#### That solves state of nature and property, Babcock 21

[Hope M. Babcock, 29 October 2021, "22 - Using the Public Trust Doctrine to Manage Property on the Moon", Cambridge University Press, https://www.cambridge.org/core/books/abs/cambridge-handbook-of-commons-research-innovations/using-the-public-trust-doctrine-to-manage-property-on-the-moon/18298C56686CA8A396517AB8D217666E, date accessed 1-25-2022] //Lex AT

Having a lottery or an auction of “ownership rights,” or establishing a system of tradable credits might lessen the equity and technical problems with the economic zone management proposal. While an auction theoretically would open up the market in development rights to non spacefaring nations, in practice, only the wealthy nations would be able to effectively bid on and secure those rights.58 However, the idea of tradable credits might work.59 Under an outer space trading system, participant nations, regardless of their space faring capacity, would be allotted a fixed number of resource development credits, allowing the credit holder to extract a certain tonnage of materials or develop a fixed amount of celestial surface, during a specified time period.60 The credits could apply to the amount of the resource a participant was allowed to extract, regardless of location, or could be tied to a particular area of a celestial body. Participants could buy credits from and sell them to other participants.61 The proposal would allow developing nations to benefit from space exploration and exploitation, and participants would run the market reducing the need for an administering international agency. Even though market participants would run the market, an international institution will be needed to allocate tradable credits and devise an allocation methodology that assures non-spacefaring nations receive some benefit. International oversight also will be needed to ensure that nations do not exceed their allotted credits. And tradable credits would need to be anchored by some form of authorization, like a permit, creating another need for a central administrative body. While the idea of tradable development credits is consistent with international law, could assure equitable distribution of the benefits of space development, and provide sufficient incentives for development of these resources, the approach may be too administratively encumbered. The public trust doctrine offers another approach for managing an open access commons. 62 Under this doctrine, the sovereign holds certain common properties in trust in perpetuity for the free and unimpeded use of the general public. The public’s right of access to and use of trust resources is never lost, and neither the government nor private individuals can alienate or otherwise adversely affect those resources unless for a comparable public purpose. Showing its adaptability, supporters of the doctrine are currently arguing in court that it applies to the atmosphere.63 The doctrine places on governments an affirmative, ongoing duty to safeguard the perpetual preservation of trust resources for the benefit of the general public, limiting the sovereign’s power on behalf of both present and future entities. It directs the government not to manage them for private gain and applies to private as well as public resources. Uses of trust resources that are inconsistent with the doctrine can be rescinded. The doctrine effectively places a permanent easement over trust resources that burdens their ownership with an overriding public interest in their preservation. Thus, the public trust doctrine protects the “people’s common heritage,” 64 just as the Moon Treaty protects outer space as part of the common heritage of mankind. A doctrine that imposes an enforceable perpetual duty on the sovereign to preserve trust resources, prevents their alienation for private benefit, and assures public access to them seems a particularly apt property management tool in outer space. The fact that public access to trust resources is so central to the doctrine65 is consistent with international space law’s open access principles. It avoids the problems of alienation and exclusion associated with private property management approaches and does not require the creation of a new administrative authority, as anyone can invoke the doctrine. Of all the management approaches discussed, the public trust doctrine seems the most suited to managing property in outer space. However, the doctrine provides no incentives for development of trust resources.66 Its traditional use has been to curtail development, making it potentially a counter productive solution to the beneficial development of outer space. Allowing limited use of private property management approaches, like tradable development credits, might buffer that effect – a form of overlapping hybridity67 between one type of property, a commons, and a management regime from another, private property, enabled by application of the public trust doctrine. This approach might allow development of outer space, while assuring that it will not just be profitable for a few; rather, space’s development will be sustainable and equitable, ideally for all.

## Util

#### The standard is maximizing expected wellbeing.

#### Warrants:

#### 1] Actor specificity:

#### A] Aggregation – every policy benefits some and harms others, which also means side constraints freeze action.

#### B] No act-omission distinction – choosing to omit is an act itself – governments decide not to act which means being presented with the aff creates a choice between two actions, neither of which is an omission

#### C] No intent-foresight distinction – If we foresee a consequence, then it becomes part of our deliberation which makes it intrinsic to our action since we intend it to happe

#### 2] Lexical pre-requisite: threats to bodily security preclude the ability for moral actors to effectively act upon other moral theories since they are in a constant state of crisis that inhibits the ideal moral conditions which other theories presuppose

#### Extinction comes first!

**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)

#### Prefer UTIL:

#### 1. Hijack—only util can account for degrees of wrongness, telling someone their shirt looks nice when it doesn’t is better than telling a slave owner where a runaway slave is which means aggregation controls the internal link to your fw

#### 2. NC collapses to the AC—if each person has infinite value, having more of that value is a good thing so you have to aggregate

#### 3. Epistemology hijack—epistemology outweighs in terms of fw justifications—it determines how we create knowledge and determine a fw in the first place; only util accounts for all forms of epistemology such as aposteriori knowledge

#### 4. Actor spec—even if Kant were true, our aspec argument indicates that moral actions committed by the state are evaluated via consequences based on how the public perceives it—perception outweighs and controls int link to your fw since agency is the basis of your fw

#### 5. Choice architecture like pulling on a push door proves instinct comes before rationality and maintaining it is an impossible burden

#### 6. Kantian philosophy is homophobic—universality justifies homophobic actions since Kant held that actions like gay sex weren’t universizable and means you should reject their fw because its bad for inclusion – a) you set a precedent for people being allowed to use oppressive theories within debate – makes debate actively unsafe and pushes marginalized groups out of debate – that’s an independent reason to drop you because the judge has an apriori obligation to reject oppression to make debate more inclusive – access is a multiplier to all your impacts b) any other model of debate leads to a race to the bottom where debaters say “this is not bad enough” which is bad for inclusion and also pushes marginalized debaters out

#### 7. Deont collapses to util—there is no act-omission distinction, so not only our actions but also inactions matter—being complicit in the deaths of the aff just as bad as killing people.

Rachels 01 (James, Encyclopedia of Ethics, 2nd edition, ed. Lawrence Becker and Charlotte Becker (New York: Routledge, 2001), vol. 2, pp. 947-50)

So what is the difference between causing and allowing? What real difference is marked by those words? The most obvious ways of attempting to draw the distinction won’t work. For example, suppose we say it is the difference between action and inaction--when we cause an outcome, we do something, but when we merely allow it to happen, we passively stand by and do nothing. This won’t work because, when we allow something to happen, we do perform at least one act: the act of allowing it to happen. The problem is that the distinction between doing something and not doing something is relative to the specification of what is or is not done--if I allow someone to die, I do not save him, but I do let him die. It is tempting to say the difference between action and inaction is the difference between moving one’s body and not moving one’s body; but that does not help. When we allow something to happen, we are typically moving our bodies in all sorts of ways. If I allow you to die by running away, I may be moving my body very rapidly.

#### 8. Emotional distress that often causes combatants to mistreat the enemy and com- mit war crimes. k when values conflict—the only way to resolve that is by using consequentialism.

Person 07, 1997 ¶ (lngmar. Lund University. Three Methods of Ethics: a debate. Eds. Baron, Marcia, Philip Petit, and Michael Stole. Pg 13-14. uw//wej)

Now the natural rights theorist maintains, of course, that. the presence of a right is such a relevant factor, or reason, that may justify departing from the goal of fulfilment maximization. In Ronald Dwor. kin's phrase, rights could in this way `trump' the pursuit of maximal fulfilment. A right to M provides a reason for holding that one morally should have M even if this is at odds with the goal mentioned. I do not say that it ensures that one should have M because the rights theorist may like to impose a limit on the weight of rights, on how great the loss of fulfilment overall may be if a right is not to be outweighed. Suppose that my hair has a unique healing quality: thousands of terminally ill patients could be saved if a couple of strands are removed and made into a medicine. What should the rights theorist say if I none the less refuse to have these strands removed? Surely, something like this: the suffering caused by respecting my right to my strands of hair is so great that we are morally justified in violating the right. But then there is a limit on the weight of my right, on its capacity to restrain maximiza- tion; a right provides a moral reason that can be outweighed. As an aside, note that, like the limit on the extension of rights, this limit would seem to have to be based on consequentialist considerations, on weighing the frustration and confusion occasioned by infring- ing our deep-seated intuitions about rights against the frustration and suffering caused by respecting them. Thus, when It comes to the precise weight of rights, no less than their extension, we see that it cannot be fixed unless we transcend the natural rights framework in favour of a consequentialist one.

#### 9. Util is the only moral system that accounts for the equality of all beings.

David **Cummiskey 90** [Associate prof of philo @ UChicago], “Kantian Consequentialism”, University of Chicago Press, Ethics, Vol. 100, No. 3 (Apr., 1990), pp. 586-615, BE

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract “social entity.” It is not a question of some persons having to bear the cost for some elusive “overall social good.” Instead, **the question is whether some persons must bear the inescapable cost for the sake of other persons.** Robert Nozick, for example, argues that “to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has.” But why is this not equally true of all those whom we do not save through our failure to act? **By emphasizing solely the one who must bear the cost if we act, we fail to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction.** In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? A morally good agent recognizes that the basis of all particular duties is the principle that “rational nature exists as an end in itself”. Rational nature as such is the supreme objective end of all conduct. **If one truly believes that all rational beings have an equal value, then the rational solution to such a dilemma involves maximally promoting the lives and liberties of as many rational beings as possible.** In order to avoid this conclusion, the non-consequentialist Kantian needs to justify agent-centered constraints. As we saw in chapter 1, however, even most Kantian deontologists recognize that agent-centered constraints require a non- value-based rationale. But we have seen that Kant’s normative theory is based on an unconditionally valuable end. How can a concern for the value of rational beings lead to a refusal to sacrifice rational beings even when this would prevent other more extensive losses of rational beings? If the moral law is based on the value of rational beings and their ends, then what is the rationale for prohibiting a moral agent from maximally promoting these two tiers of value? **If I sacrifice some for the sake of others, I do not use them arbitrarily, and I do not deny the unconditional value of rational beings.** Persons may have “dignity, that is, an unconditional and incomparable worth” that transcends any market value, but persons also have a fundamental equality that dictates that some must sometimes give way for the sake of others. The concept of the end-in-itself does not support the view that we may never force another to bear some cost in order to benefit others.

#### 10. Universal law devolves to consequentialism

SHELLY KAGAN 2 [Professor of Philosophy at Yale University and the former Henry R. Luce Professor of Social Thought and Ethics], “Kantianism for Consequentialists”, essay in Groundwork for the Metaphysics of Morals Yale ’02 Edition, 2002, BE

Now in principle, I suppose, it could be a different maxim in each case. But this hardly seems likely. For as we have seen, maxims that pass FUL are supposed to do so by virtue of referring to the various features of the situation that actually provide the agent with adequate reason for acting in the specified manner. A valid, fully specified maxim would pick out all and only those features of the situation that make it reasonable for the agent to act in the given way. According to consequentialism, however, what ul- timately justifies an agent’s performing a given act is always the very same reason, namely, that the act would lead to the best results overall. Thus the consequentialist believes that in any given case, the act that leads to the best results is the appropriate act to perform, and the ultimate reason why it is the right act to perform is the very fact that it leads to the best results. Thus we should expect the consequentialist to hold that the principle ‘‘act in the way that has the best results overall’’ is universally valid, and that the quite general maxim ‘‘I will act in the way that has the best results overall’’ will pass FUL (no matter what the particular case at hand).¶ So let us consider that maxim. If it passes FUL, then, of course, it is permissible to act on it, which means that it will always be permissible to perform the act that has the best results overall—whatever type of act that may be, and whatever the circumstances. In short, if the consequentialist maxim (as we might call it) passes FUL, then it is never forbidden to perform the act with the best results, FUL does not support constraints, and FUL does not support deontology.¶ Does the consequentialist maxim pass FUL? I believe it does. At the very least it must be admitted that if it fails FUL it is not obvious how and why it does so. Consider the sorts of difficulties that have plagued maxims in our previous examples. On at least one interpretation of the false promis- ing example we literally cannot imagine a world in which everyone makes¶ false promises. Is there any comparable impossibility with regard to a world where everyone acts in such a way as to produce the best results overall? Obviously not. A world where everyone promotes the overall good is, sad to say, highly unrealistic, but there is no conceptual impossibility involved in trying to imagine it.¶ On the alternative interpretation of the false promising example, the existence of a world where everyone makes false promises makes it more difficult to achieve the end specified in the maxim itself through the means specified by the maxim (that is, getting out of a tight spot by making a false promise is less likely in a world where everyone tries to do this). When one imagined the maxim as universal law, the maxim’s course of action became a less effective means to the maxim’s own end. This was a kind of practical contradiction. Is there any comparable practical contradiction involved in imagining a world where everyone promotes the overall good? Again, the answer is obviously not. A world where everyone promotes the overall good is not a world that makes it more difficult to bring about the best results overall. On the contrary, it is likely to be a world that makes it easier to bring about the best results overall. Thus, whatever our interpretation of the first step of the FUL test, there seems to be no reason to think that universalizing the consequentialist maxim leads to a ‘‘contradiction in thought.’’¶ Nor, so far as I can see, is there any reason to believe that universalizing the consequentialist maxim leads to problems at the second step, generating a ‘‘contradiction in will.’’ When we imagined a world where no one aided others in need, this was indeed a coherent possibility, but we found we could not will the relevant maxim to be a universal law. Given that we ourselves could have needs (that we were unable to meet without aid from others), it violated a principle of instrumental reasoning to favor a maxim that if made a universal law would necessarily leave those needs unmet. But is there any comparable violation of instrumental reason involved with willing it to be a universal law that everyone is to bring about as much good as possible? It is far from clear that there is.¶ To be sure, if it is a universal law that everyone is to bring about as much good as possible, then there may arise cases in which I may have to make significant sacrifices for others. From the point of view of instrumental reasoning this is undesirable, and gives me some reason to oppose such a requirement. But we have, of course, already considered this point. Since I am asking what I can will to be universal law, I must also consider the possibility that I might be the recipient of the aid. In effect, I must weigh all the potential costs against all the potential benefits, and when I do this—or¶ so I have argued—instrumental reasoning will lead me to favor a principle in which sacrifices are required precisely when the benefits are greater than the costs. That is to say, instrumental reasoning will lead me to favor a principle requiring each of us to act in the way that has the best results overall.¶ Are there other reasons to think that I cannot rationally favor its being a universal law that everyone is to act in such a way as to maximize the overall good? At the very least it is not obvious what they might be.¶ Of course, one might object to such a law on the very ground that it would permit violating constraints! Intuitively, after all, certain acts are simply morally forbidden, despite their results. But promoting the overall good might sometimes require performing acts of these intuitively unac- ceptable kinds. Isn’t this adequate grounds for refusing to will the maxim to be a universal law?¶ In point of fact, however, it is not at all clear that such intuitions are even relevant in thinking about which maxims pass FUL. FUL, after all, was supposed to be the basis of morality, the source of the valid moral principles (whatever they turn out to be). It can’t play this role if we are going to presuppose various moral principles (whether directly, or by relying on moral intuitions) in determining what can, and what cannot, pass FUL. Put another way, given the kantian account of the foundations of ethics, appeals to moral intuitions are logically beside the point, until we have confirmed their accuracy independently, through appeal to FUL (cf. G 4:408–10). Thus we cannot appeal to the intuitive plausibility of constraints, and use this as a reason for claiming that principles that violate such constraints must fail FUL. Rather, we must first decide what passes FUL—and we must do this on independent grounds. And what this means, of course, is that despite the intuitive appeal of constraints, we don’t yet have reason to think that FUL generates constraints.¶ For all that, of course, there might well be further arguments available to those who want to claim that I cannot rationally will it to be a universal law that everyone do the act with the best results overall. If such further consid- erations were offered, and found to be compelling, then it would indeed turn out that the consequentialist maxim cannot pass FUL. I certainly haven’t attempted to discuss all possible arguments along these lines. But it must be admitted, I think, that it isn’t obvious what these further arguments might look like. And so I think we should conclude—even if only tentatively— that our maxim can indeed pass FUL. Or, at a minimum, we should at least admit that this possibility is not one that can be readily dismissed.¶ But if the maxim passes FUL then it is always permissible to act on it. It¶ is always permissible to do the act that will have the best results overall. Thus, if the consequentialist maxim passes, there are no constraints. FUL simply doesn’t generate them.¶ Putting together the results of these various arguments, we can say, at a minimum, that it should not be taken to be obvious that FUL supports a deontological normative theory. On the contrary, there is at least some reason to believe that FUL yields no constraints at all, despite what Kant and most kantians have assumed. Indeed, there is some reason to believe that FUL supports a normative theory with neither constraints nor options. On such a theory, each of us is simply required to do as much good as possible. But this, of course, is consequentialism.¶ Here is a slightly different way to see how consequentialism is supported by FUL (assuming that the arguments we have been considering are sound). We have just argued that despite what kantians have typically thought, it may well be the case that kantian foundations support the claim that it is always permissible to do the act that will have the best results overall. By itself, of course, this result (even if correct) wouldn’t yet show that we are required to do the act with the best results. But this further conclusion would indeed follow given the earlier claim that we are required to do as much good as possible within the limits of whatever constraints there may be. For if we are always permitted to do the act with the best results, there are no constraints. Thus the requirement to do as much good as possible within the limits of constraints reduces to the simple requirement to do as much good as possible. Each of us is required to do the act with the best results overall. But this, again, is precisely the claim of consequentialism.¶ These same basic ideas (if they are accepted) can be rearranged once more, into an even more straightforward ‘‘proof’’ that FUL supports conse- quentialism. To begin with, since the consequentialist maxim passes FUL, agents are always permitted to perform the act with the best results overall. But in point of fact, contrary to what most people have thought, no other maxim will pass FUL as well∞∏ (since any maxim that permitted doing less, or required doing something different, would run afoul of the principle of instrumental reason, and thus could not be willed to be universal law). Thus agents are actually required to do the act that would best promote the overall good. In short, given FUL—and assuming, of course, that the argu- ments we have been considering are correct—everyone is required to do the act with the best results overall, just as consequentialism claims.

## Constitutivism

### Fallacy of Division

#### Fallacy of division—just because something like [] is constitutive of moral systems as a whole, it doesn’t mean every single action we take has to be consistent with that principle. Even though a plane as a whole can fly, each part independently can’t—we wouldn’t book a flight on an engine.

### No Aim

#### Empirically, there is no single aim constitutive of action.

Nir Ben-Moshe 10 [recently completed a Ph.D. in philosophy at the University of Chicago. Beginning Fall 2015, I will be assistant professor of philosophy at the University of Illinois], The Scope and Limits of Ethical Constitutivism, 2010

So in order to show that normativity cannot be derived from what is constitutive of action, we have to show that there is no X which is constitutive action. This will do away with the internal standard of correctness for action. We will then be justified in saying, with Enoch, that we require a reason, external to agency, for being an agent. This would, of course, be an extremely difficult project to undertake. Perhaps Freudian discoveries, such as primary process mental functioning and tropisms like projection and introjections, are the key to this project. As Lear frames it, such discoveries show us that “minds are not mere algorithm-performing machines, and they do not merely follow out the logical consequences of an agent’s beliefs and desires” (Lear 1998, pp. 84-85). Indeed, some mental activities, such as unconscious phantasizing, operate relatively free of the holistic system of an agent’s beliefs and desires (ibid., p. 93). If the human mind does not follow a particular algorithm when the human agent performs a particular action, then it is hard, I think, to see how there can be one particular aspect of our agency which is constitutive of action. But one could argue that these are empirical findings which have no bearing on the formal conception of what is constitutive of action. I know turn to deal precisely with this distinction.

### AT: Regress

#### Knowing any moral truths solves justificatory regress—means our framework answers your meta-ethic.

Derek Parfit 11, [Research Fellow at All Soul’s College Oxford; visiting professor of philosophy at NYU/Harvard/Rutgers], On What Matters Volume 1, Oxford University Press.

As before, Korsgaard ignores the realist’s view. Any reason, she assumes, must be derived from some maxim, or principle, which we have adopted. To solve Korsgaard’s problem, **we must find some principle about which we cannot or need not ask why we have *chosen* it.** According to realists, **we should try to find some truths about what we have reason to want**, and do. **If there are such truths, these are not principles that we *adopt* or *choose*. We *believe* truths. And if we both believe such truths, and** know why we ought to believe them, that would end Korsgaard’s justificatory regress. Though it would not be impossible or incoherent

### AT: agents can shift

#### util solves

### Rarity

#### Universalizing principles fails because of the rarity objection.

Derek Parfit 11 [Oxford], On What Matters (June 11, 2011 version), 241-242.

**Suppose that I wrongly steal some wallet from some woman dressed in white who is eating strawberries while reading the last page of Spinoza’s *Ethics*.** My maxim is to act in precisely this way, whenever I can. **I could rationally will it to be true that this maxim is universal, because it would be most unlikely that anyone else would ever be able to act in precisely this way, so this maxim’s being universal would be most unlikely to make any difference.** Since I could rationally will this maxim to be universal, Kant’s formulas mistakenly permit my act**.** Similar claims apply to other highly specific maxims. When wrong-doers act on such maxims, they could rationally will that their maxims be universal, because they would know that other such acts would be rare, and would therefore make little difference. Kant’s formulas would mistakenly permit these wrong acts. We can call this the *Rarity Objection*.

### On their UV

#### The entirety of the 1NC proves the aff is a bad idea so drop the permissibility affirms.

#### Comparative worlds over truth testing – that means

#### 1] Topic ed – comparing different worlds incentivizes studying the topic while TT averts that. Topic ed weighs because it helps us learn/debate real-world issues that help us in the future.

#### 2] Resolvability – impossible to weigh between different truth or false claims because they don’t have any weighing mechanisms – i.e., can’t be more true or less false. That oweighs: a) predictability – topic debate is grounded in the resolution which is the only thing we all know b) engagement -- allows for deeper clash b/c topic scenarios are more developed b/c they reflect real world dilemmas.

**Clash o/ws – it allows us to go into the nuances of arguments which prevents against arbitrary decision making that takes the debate out of the debaters hand. That comes first – fairness concerns can be resolved by research, drills and becoming more responsive but a lack of clash destroys all that because it degrades the evaulation proccess**

#### 3] Limits – infinite ways to prove the resolution true or false through paradoxes or spikes which destroys predictability. Unpredictable debates hurt clash and create time/strat skew.

**4] Research. Our model encourages deep and reciprocal research that’s k2 iterative testing and clash on das, cps, etc. versus their model incentiizes cheapshot triggers and a prioris.**