## OFF

### 1NC – OFF

#### Interp: The affirmative must define “private entities” in a delimited text in the 1AC.

#### “Private Entities” are flexible and has too many interps – normal means shows no consensus and makes the round irresolvable since the judge doesn’t know how to compare between types of offense and o/w since it’s a side constraint on decision making.

UpCounsel ND [“Private Entity: Everything You Need to Know”. UpCounsel (interactive online service that makes it faster and easier for businesses to find and hire legal help). No Date. Accessed 12/17/21. <https://www.upcounsel.com/private-entity> //Xu]

A private entity can be a partnership, corporation, individual, nonprofit organization, company, or any other organized group that is not government-affiliated. Indian tribes and foreign public entities are not considered private entities.

Unlike publicly traded companies, private companies do not have public stock offerings on Nasdaq, American Stock Exchange, or the New York Stock Exchange. Instead, they offer shares privately to interested investors, who may trade among themselves.

Private Company vs. Private Entity

The Companies Act of 2013 governs the registration of private companies.

This type of company is formed by following the steps laid out by this law.

Private entities are determined not by this law but by ownership and holding. For example, sole proprietorships and partnerships are designed as private entities.

A private entity is not necessarily a private company, but all private companies are private entities.

How Private Entities Work

Although private companies can be of any size, they often include a small group of chosen investors who may include employees, colleagues, friends and family, and other interested parties. If this type of company needs funding to grow, it may seek it from venture capital firms or from large institutional investors. Some private companies eventually decide to go public with an initial public offering (IPO) of stock shares on a public exchange. Sometimes, public companies go private when a large investor buys a bulk of the outstanding stock shares and plans to remove them from public exchanges.

How FOIA Affects Private Entities

The Freedom of Information Act (FOIA) is a federal law that requires certain agencies to provide certain types of records to any person who asks. Major government bodies such as federal courts and Congress are exempt from FOIA. Some state agencies are also exempt depending on state laws governing public records. In general, FOIA applies to:

Federal, state, and local government agencies, such as the Federal Communications Commission.

Certain state legislatures depending on the laws in those states.

Most private entities are not bound by federal FOIA laws. However, these laws may apply to private entities involved in government business. This situation occurred in Colorado in 2000, when a nonprofit corporation was required by the state's Court of Appeals to share documents related to a project it was working on with the city of Denver.

#### Violation – you don’t.

#### Prefer –

#### 1] Stable Advocacy – they can redefine in the 1AR to wriggle out of DA’s which kills high-quality engagement and becomes two ships passing in the night – triggers presumption since the aff wasn’t subject to well researched scrutiny. We lose access to Tech Race DA’s, Asteroid DA’s, basic case turns, and core process counter plans that have different definitions and 1NC pre-round prep.

#### 2] Ground – not defining hurts my strategy since they can shift out as I ask DA questions, so I err on the side of caution and read generics which get destroyed by AC frontlines.

#### 3] Real World – Policy makers will always define the entity that they are recognizing. It also means zero solvency, absent spec, private entities can circumvent since there is no delineated way to enforce the aff and means their solvency can’t actualize.

#### OSspec isn’t regressive or arbitrary – its core topic lit for what happens when the aff is implemented and cannot be discounted from policies that require enforcement to function.

#### Fairness is a voter debate is a competitive activity that requires objective evaluation

#### Topicality is a voting issue that should be evaluated through competing interpretations a] it tells the negative what they do and do not have to prepare for b] reasonability is arbitrary and incentivizes judge intervention

#### No RVIs—a] it’s your burden to be topical. Anything else chills real abuse b] forces theory debaters to bait theory and win on it every time

## ON

### UV

#### Reasonability on 1AR shells – 1AR theory is very aff-biased because the 2AR gets to line-by-line every 2NR standard with new answers that never get responded to– reasonability checks 2AR sandbagging by preventing really abusive 1NCs while still giving the 2N a chance.

#### DTA on 1AR shells - They can blow up a blippy 20 second shell to 3 min of the 2AR while I have to split my time and can’t preempt 2AR spin which necessitates judge intervention and means 1AR theory is irresolvable so you shouldn’t stake the round on it.

#### RVIs on 1AR theory – 1AR being able to spend 20 seconds on a shell and still win forces the 2N to allocate at least 2:30 on the shell which means RVIs check back time skew – ows on quantifiability. If they get 1AR theory, then we get the RVI – you should go for the shell in the 2AR if we were “infinitely abusive”.

#### No new 1ar theory paradigm issues or voters- A] the 1NC has already occurred with current paradigm issues in mind so new 1ar paradigms moot any theoretical offense B] introducing them in the aff allows for them to be more rigorously tested which o/w’s on time frame since we can set higher quality norms.

#### Presumption and Permissibility negate [A] to negate[[1]](#footnote-1) means to deny the truth of which means if the aff is false you vote neg [B] the aff has to prove an obligation which means lack of that obligation negates

Presumption negates

A] more often false than true since I can prove something false in infinite ways

B] Time and effort DA - real world policies require positive justification before being adopted

C] Turns fairness since you could just read a non-inherent aff and win off presumption. \

D] 1] Infinite prep time before round to frontline 2] 2AR judge psychology and 1st and last speech 3] Infinite perms and uplayering in the 1AR.

Permissibility negates

A] permissibility can’t affirm since then anything would be ok which would justify racism – we should be safe and do nothing.

B] resolved in the resolution indicates they proactively did something, to negate that means that they aren’t resolved

C] Turn – we’d never be able to take actions because we’d be obligated to everything.

### FW LBL

a.] Infinite suffering access the same magnitude they claim future generations has of infinity

b.] People not alive yet can’t feel pain or pleasure– which means that they don’t get included in utilitarian calculus – which means at best the aff is capped at the magnitude of 7 billion for each person that dies, but we have a magnitude of infinity times that meaning we o/w on magnitude.

c.] Calculus – some infinity are bigger than other and makes their impact calculus incoherent. If I kill 1 and other kills 100 – cuz infinite future. Slow violence o/ws – alternative calculus invisibliez current vioolnce

### 1NC – Framing O/V

#### 1] This doesn’t mean extinction first – but rather minimizing suffering comes first

#### 2] Value to life outweighs death – Death only matters if there is some sort of value to it

#### 3] Extinction foreclosing future value is not a reason to vote for them – they’d have to win the UQ claim that value in the future will go up which it won’t

### Climate adv

#### Not causal warrant – card says better climate policy not actually solving warming

#### No solvency – data doesn’t = solution for tipping points in klein

### 1NC – Long

#### The best estimate is there are 210 million current alien civilizations

Lichfield 16 – Gideon Lichfield, Editor-in-Chief of MIT Technology Review, Senior Editor at Quartz, Fellow at the Data & Society Research Institute, MSc in the Philosophy of Science from the London School of Economics and Political Science, BSc in Physics and Philosophy from the University of Bristol, Former Adjunct Professor in the Global Journalism Program at New York University, “There Have Probably Been Trillions Of Alien Civilizations, And Yet We May Still Never See One”, Quartz, 6-11, <https://qz.com/704687/there-have-probably-been-trillions-of-alien-civilizations-and-yet-we-may-still-never-see-one/>

[Paper internally quoted is by Adam Frank, Professor of Physics and Astronomy at the University of Rochester and Woodruff Sullivan, Professor of Astronomy and Astrobiology at the University of Washington]

Sorry, everybody. We’re just not that special.

In more than five decades of scanning the heavens, the search for extraterrestrial intelligence (SETI) has found no sign of alien life. Yet now two American astronomers, in the scientific equivalent of a back-of-the-envelope calculation, are estimating that over the course of its history the universe has seen at least half a trillion technologically advanced species.

The paper in Astrobiology by Adam Frank and Woodruff Sullivan notes that, in just the last few years, we’ve gained a much clearer sense of how hospitable the universe is to life. NASA’s Kepler space telescope has identified thousands of planets in our neighborhood of the galaxy, along with their sizes and distances from their stars. From there it’s fairly easy to guess how many may hold liquid water, which is probably essential for complex life. In our Milky Way galaxy alone there are, by this estimate, some 60 billion such “habitable” planets, write Frank and Sullivan.

The big remaining unknown is how many of these planets give rise to the kinds of lifeforms that build advanced technology (if nuclear weapons and Oculus Rifts can be called “advanced”). Since Earth is the only one we know of, the guesses vary wildly, but one such civilization per 10 billion habitable planets is generally considered “highly pessimistic,” wrote Frank in the New York Times yesterday (paywall). In astronomy-speak, this means the figure could be 10, 100 or even 1,000 times too low.

Using that “pessimistic” proportion, and other numbers from Frank and Sullivan’s paper, I calculated how many alien civilizations should have emerged within various subregions of the universe during its history:

Table

Description automatically generated with medium confidence

Remember, 420 billion intelligent civilizations is the “pessimistic” estimate. But sadly—or happily, depending on your view of aliens—it doesn’t make us any less alone.

Though Frank and Sullivan wisely avoid putting a number on how many alien species are knocking around right now, we can do our own back-of-the-envelope reckoning. A crucial unknown factor is how long a technologically advanced civilization lasts before either going extinct or blasting itself back to the stone age. Judging by the past century of human history, even a thousand years might be optimistic. But let’s be really optimistic and call it a million years. That’s the average lifespan of a mammalian species that doesn’t invent the means of its own destruction.

I’m also going to assume that, though the universe is 13.8 billion years old, advanced species didn’t begin to appear until a couple of billion years ago. It took most of the universe’s history to form the kinds of planets, rich in heavier elements, on which creatures like us could evolve.

So if there have been 420 billion civilizations in the past 2 billion years, each one lasting a million years, then on average, about 210 million of them have existed simultaneously at any given moment.

Update: Seth Shostak, senior astronomer at the SETI Institute, has responded to this article saying that “many have guessed” that one in a million habitable worlds would produce advanced intelligence, rather than one in 10 billion. If so, and sticking to the other assumptions, there’d a good chance of at least one other civilization in our own galaxy existing at the same time as ours, meaning it would much closer, and thus more plausibly detectable.

#### Universe destruction outweighs human extinction---earth is insignificant.

Hughes 18 [Dr. Nick Hughes, Postdoctoral Research Fellow at University College Dublin, PhD in Philosophy from University of St Andrews & University of Olso, and Dr. Guy Kahane, Professor of Philosophy at the University of Oxford, D. Phil. in Philosophy from Oxford University, “Our Cosmic Insignificance”, 7-6, http://www.unariunwisdom.com/our-cosmic-insignificance/]

Humanity occupies a very small place in an unfathomably vast Universe. Travelling at the speed of light – 671 million miles per you are herehour – it would take us 100,000 years to cross the Milky Way. But we still wouldn’t have gone very far. Our modest Milky Way galaxy contains 100–400 billion stars. This isn’t very much: according to the latest calculations, the observable universe contains around 300 sextillion stars. By recent estimates, our Milky Way galaxy is just one of 2 trillion galaxies in the observable Universe, and the region of space that they occupy spans at least 90 billion light-years. If you imagine Earth shrunk down to the size of a single grain of sand, and you imagine the size of that grain of sand relative to the entirety of the Sahara Desert, you are still nowhere near to comprehending how infinitesimally small a position we occupy in space. The American astronomer Carl Sagan put the point vividly in 1994 when discussing the famous ‘Pale Blue Dot’ photograph taken by Voyager 1. Our planet, he said, is nothing more than ‘a mote of dust suspended in a sunbeam’. Stephen Hawking delivers the news more bluntly. We are, he says, “just a chemical scum on a moderate-sized planet, orbiting round a very average star in the outer suburb of one among a hundred billion galaxies.”

And that’s just the spatial dimension. The observable Universe has existed for around 13.8 billion years. If we shrink that span of time down to a single year, with the Big Bang occurring at midnight on 1 January, the first Homo sapiens made an appearance at 22:24 on 31 December. It’s now 23:59:59, as it has been for the past 438 years, and at the rate we’re going it’s entirely possible that we’ll be gone before midnight strikes again. The Universe, on the other hand, might well continue existing forever, for all we know. Sagan could have added, then, that our time on this mote of dust will amount to nothing more than a blip. In the grand scheme of things we are very, very small.

For Sagan, the Pale Blue Dot underscores our responsibility to treat one another with kindness and compassion. But reflection on the vastness of the Universe and our physical and temporal smallness within it often takes on an altogether darker hue. If the Universe is so large, and we are so small and so fleeting, doesn’t it follow that we are utterly insignificant and inconsequential? This thought can be a spur to nihilism. If we are so insignificant, if our existence is so trivial, how could anything we do or are – our successes and failures, our anxiety and sadness and joy, all our busy ambition and toil and endeavour, all that makes up the material of our lives – how could any of that possibly matter? To think of one’s place in the cosmos, as the American philosopher Susan Wolf puts it in ‘The Meanings of Lives’ (2007), is ‘to recognise the possibility of a perspective … from which one’s life is merely gratuitous’.

The sense that we are somehow insignificant seems to be widely felt. The American author John Updike expressed it in 1985 when he wrote of modern science that:

We shrink from what it has to tell us of our perilous and insignificant place in the cosmos … our century’s revelations of unthinkable largeness and unimaginable smallness, of abysmal stretches of geological time when we were nothing, of supernumerary galaxies … of a kind of mad mathematical violence at the heart of the matter have scorched us deeper than we know.

In a similar vein, the French philosopher Blaise Pascal wrote in Pensées (1669):

When I consider the short duration of my life, swallowed up in an eternity before and after, the little space I fill engulfed in the infinite immensity of spaces whereof I know nothing, and which know nothing of me, I am terrified. The eternal silence of these infinite spaces frightens me.

Commenting on this passage in Between Man and Man (1947), the Austrian-Israeli philosopher Martin Buber said that Pascal had experienced the ‘uncanniness of the heavens’, and thereby came to know ‘man’s limitation, his inadequacy, the casualness of his existence’. In the film Monty Python’s The Meaning of Life (1983), John Cleese and Eric Idle conspire to persuade a character, played by Terry Gilliam, to give up her liver for donation. Understandably reluctant, she is eventually won over by a song that sharply details just how comically inconsequential she is in the cosmic frame.

Even the relatively upbeat Sagan wasn’t, in fact, immune to the pessimistic point of view. As well as viewing it as a lesson in the need for collective goodwill, he also argued that the Pale Blue Dot challenges ‘our posturings, our imagined self-importance, and the delusion that we have some privileged position in the Universe’.

When we reflect on the vastness of the universe, our humdrum cosmic location, and the inevitable future demise of humanity, our lives can seem utterly insignificant. As we complacently go about our little Earthly affairs, we barely notice the black backdrop of the night sky. Even when we do, we usually see the starry skies as no more than a pleasant twinkling decoration.

This sense of cosmic insignificance is not uncommon; one of Joseph Conrad’s characters describes

one of those dewy, clear, starry nights, oppressing our spirit, crushing our pride, by the brilliant evidence of the awful loneliness, of the hopeless obscure insignificance of our globe lost in the splendid revelation of a glittering, soulless universe. I hate such skies.

The young Bertrand Russell, a close friend of Conrad, bitterly referred to the Earth as “the petty planet on which our bodies impotently craw.” Russell wrote that:

Brief and powerless is Man’s life; on him and all his race the slow, sure doom falls pitiless and dark. Blind to good and evil, reckless of destruction, omnipotent matter rolls on its relentless way…

This is why Russell thought that, in the absence of God, we must build our lives on “a foundation of unyielding despair.”

When we consider ourselves as a mere dot in a vast universe, when we consider ourselves in light of everything there is, nothing human seems to matter. Even the worst human tragedy may seem to deserve no cosmic concern. After all, we are fighting for attention with an incredibly vast totality. How could this tiny speck of dust deserve even a fraction of attention, from that universal point of view?

This is the image that is evoked when, for example, Simon Blackburn writes that “to a witness with the whole of space and time in its view, nothing on the human scale will have meaning”.

Such quotations could be easily multiplied—we find similar remarks, for example, in John Donne, Voltaire, Schopenhauer, Byron, Tolstoy, Chesterton, Camus, and, in recent philosophy, in Thomas Nagel, Harry Frankfurt, and Ronald Dworkin.

The bigger the picture we survey, the smaller the part of any point within it, and the less attention it can get… When we try to imagine a viewpoint encompassing the entire universe, humanity and its concerns seem to get completely swallowed up in the void.

Over the centuries, many have thought it absurd to think that we are the only ones. For example, Anaxagoras, Epicurus, Lucretius, and, later, Giordano Bruno, Huygens and Kepler were all confident that the universe is teeming with life. Kant was willing to bet everything he had on the existence of intelligent life on other planets. And we now know that there is a vast multitude of Earth-like planets even in our own little galaxy.

#### Alien lives should be valued as equal to humans---anything else is arbitrary and a logic of devaluation that is at the root of violence

Packer 7 – Joe Packer, then MA in Communication from Wake Forest University, now PhD in Communication from the University of Pittsburgh and Professor of Communication at Central Michigan University, Alien Life in Search of Acknowledgment, p. 62-63

Once we hold alien interests as equal to our own we can begin to revaluate areas previously believed to hold no relevance to life beyond this planet. A diverse group of scholars including Richard Posner, Senior Lecturer in Law at the University of Chicago, Nick Bostrom, philosophy professor at Oxford University, John Leslie philosophy professor at Guelph University and Martin Rees, Britain’s Astronomer Royal, have written on the emerging technologies that threaten life beyond the planet Earth. Particle accelerators labs are colliding matter together, reaching energies that have not been seen since the Big Bang. These experiments threaten a phase transition that would create a bubble of altered space that would expand at the speed of light killing all life in its path. Nanotechnology and other machines may soon reach the ability to self replicate. A mistake in design or programming could unleash an endless quantity of machines converting all matter in the universe into copies of themselves. Despite detailing the potential of these technologies to destroy the entire universe, Posner, Bostrom, Leslie, and Ree’s only mention of alien life in their works is in reference to the threat aliens post to humanity. The rhetorical construction of otherness only in terms of the threats it poses, but never in terms of the threat one poses to it, has been at the center of humanity’s history of genocide, colonization, and environmental destruction. Although humanity certainly has its own interests in reducing the threat of these technologies evaluating them without taking into account the danger they pose to alien life is neither appropriate nor just. It is not appropriate because framing the issue only in terms of human interests will result in priorities designed to minimize the risks and maximize the benefits to humanity, not all life. Even if humanity dealt with the threats effectively without referencing their obligation to aliens, Posner, Bostrom, Leslie, and Ree’s rhetoric would not be “just,” because it arbitrarily declares other life forms unworthy of consideration. A framework of acknowledgement would allow humanity to address the risks of these new technologies, while being cognizant of humanity’s obligations to other life within the universe. Applying the lens of acknowledgment to the issue of existential threats moves the problem from one of self destruction to universal genocide. This may be the most dramatic example of how refusing to extend acknowledgment to potential alien life can mask humanity’s obligations to life beyond this planet.

#### Extinction ends human-caused suffering and death of non-human animals---this outweighs any value to humanity---AND we access it even if the process is slow, because societal breakdown ends this suffering in the short term

May 18 – Dr. Todd May, Professor of Philosophy at Clemson University, PhD in Philosophy from Penn State University, MA in Psychology from Duquesne University, “Would Human Extinction Be a Tragedy?”, The New York Times, 12-17, https://www.nytimes.com/2018/12/17/opinion/human-extinction-climate-change.html

There are stirrings of discussion these days in philosophical circles about the prospect of human extinction. This should not be surprising, given the increasingly threatening predations of climate change. In reflecting on this question, I want to suggest an answer to a single question, one that hardly covers the whole philosophical territory but is an important aspect of it. Would human extinction be a tragedy?

To get a bead on this question, let me distinguish it from a couple of other related questions. I’m not asking whether the experience of humans coming to an end would be a bad thing. (In these pages, Samuel Scheffler has given us an important reason to think that it would be.) I am also not asking whether human beings as a species deserve to die out. That is an important question, but would involve different considerations. Those questions, and others like them, need to be addressed if we are to come to a full moral assessment of the prospect of our demise. Yet what I am asking here is simply whether it would be a tragedy if the planet no longer contained human beings. And the answer I am going to give might seem puzzling at first. I want to suggest, at least tentatively, both that it would be a tragedy and that it might just be a good thing.

To make that claim less puzzling, let me say a word about tragedy. In theater, the tragic character is often someone who commits a wrong, usually a significant one, but with whom we feel sympathy in their descent. Here Sophocles’s Oedipus, Shakespeare’s Lear, and Arthur Miller’s Willy Loman might stand as examples. In this case, the tragic character is humanity. It is humanity that is committing a wrong, a wrong whose elimination would likely require the elimination of the species, but with whom we might be sympathetic nonetheless for reasons I discuss in a moment.

To make that case, let me start with a claim that I think will be at once depressing and, upon reflection, uncontroversial. Human beings are destroying large parts of the inhabitable earth and causing unimaginable suffering to many of the animals that inhabit it. This is happening through at least three means. First, human contribution to climate change is devastating ecosystems, as the recent article on Yellowstone Park in The Times exemplifies. Second, increasing human population is encroaching on ecosystems that would otherwise be intact. Third, factory farming fosters the creation of millions upon millions of animals for whom it offers nothing but suffering and misery before slaughtering them in often barbaric ways. There is no reason to think that those practices are going to diminish any time soon. Quite the opposite.

Humanity, then, is the source of devastation of the lives of conscious animals on a scale that is difficult to comprehend.

To be sure, nature itself is hardly a Valhalla of peace and harmony. Animals kill other animals regularly, often in ways that we (although not they) would consider cruel. But there is no other creature in nature whose predatory behavior is remotely as deep or as widespread as the behavior we display toward what the philosopher Christine Korsgaard aptly calls “our fellow creatures” in a sensitive book of the same name.

If this were all to the story there would be no tragedy. The elimination of the human species would be a good thing, full stop. But there is more to the story. Human beings bring things to the planet that other animals cannot. For example, we bring an advanced level of reason that can experience wonder at the world in a way that is foreign to most if not all other animals. We create art of various kinds: literature, music and painting among them. We engage in sciences that seek to understand the universe and our place in it. Were our species to go extinct, all of that would be lost.

Now there might be those on the more jaded side who would argue that if we went extinct there would be no loss, because there would be no one for whom it would be a loss not to have access to those things. I think this objection misunderstands our relation to these practices. We appreciate and often participate in such practices because we believe they are good to be involved in, because we find them to be worthwhile. It is the goodness of the practices and the experiences that draw us. Therefore, it would be a loss to the world if those practices and experiences ceased to exist.

One could press the objection here by saying that it would only be a loss from a human viewpoint, and that that viewpoint would no longer exist if we went extinct. This is true. But this entire set of reflections is taking place from a human viewpoint. We cannot ask the questions we are asking here without situating them within the human practice of philosophy. Even to ask the question of whether it would be a tragedy if humans were to disappear from the face of the planet requires a normative framework that is restricted to human beings.

Let’s turn, then, and take the question from the other side, the side of those who think that human extinction would be both a tragedy and overall a bad thing. Doesn’t the existence of those practices outweigh the harm we bring to the environment and the animals within it? Don’t they justify the continued existence of our species, even granting the suffering we bring to so many nonhuman lives?

To address that question, let us ask another one. How many human lives would it be worth sacrificing to preserve the existence of Shakespeare’s works? If we were required to engage in human sacrifice in order to save his works from eradication, how many humans would be too many? For my own part, I think the answer is one. One human life would be too many (or, to prevent quibbling, one innocent human life), at least to my mind. Whatever the number, though, it is going to be quite low.

Or suppose a terrorist planted a bomb in the Louvre and the first responders had to choose between saving several people in the museum and saving the art. How many of us would seriously consider saving the art?

So, then, how much suffering and death of nonhuman life would we be willing to countenance to save Shakespeare, our sciences and so forth? Unless we believe there is such a profound moral gap between the status of human and nonhuman animals, whatever reasonable answer we come up with will be well surpassed by the harm and suffering we inflict upon animals. There is just too much torment wreaked upon too many animals and too certain a prospect that this is going to continue and probably increase; it would overwhelm anything we might place on the other side of the ledger. Moreover, those among us who believe that there is such a gap should perhaps become more familiar with the richness of lives of many of our conscious fellow creatures. Our own science is revealing that richness to us, ironically giving us a reason to eliminate it along with our own continued existence.

One might ask here whether, given this view, it would also be a good thing for those of us who are currently here to end our lives in order to prevent further animal suffering. Although I do not have a final answer to this question, we should recognize that the case of future humans is very different from the case of currently existing humans. To demand of currently existing humans that they should end their lives would introduce significant suffering among those who have much to lose by dying. In contrast, preventing future humans from existing does not introduce such suffering, since those human beings will not exist and therefore not have lives to sacrifice. The two situations, then, are not analogous.

It may well be, then, that the extinction of humanity would make the world better off and yet would be a tragedy. I don’t want to say this for sure, since the issue is quite complex. But it certainly seems a live possibility, and that by itself disturbs me.

#### Humans will inevitably go to space if we don’t go extinct

Baumann 17 – Tobias Baumann, PhD Student in Computer Science at University College London, Master’s Degree in Mathematics and Bachelor’s Degree in Computer Science and Physics from Ulm University, Former Quantitative Trader at Jane Street Capital, “S-Risks: An Introduction”, 8-15, http://s-risks.org/intro/

Crucially, factory farming is the result of economic incentives and technological feasibility, not of human malice or bad intentions. Most humans don’t approve of animal suffering per se – getting tasty food incidentally happens to involve animal suffering. In other words, technological capacity plus indifference is already enough to cause unimaginable amounts of suffering. This should make us mindful of the possibility that future technologies might lead to a similar moral catastrophe.

New technologies and astronomical stakes

Barring extinction or civilizational collapse, technological progress will likely be inexorable. This means that new technologies will endow humanity with unprecedented power. Similar to technologies of the past, they will give rise to both tremendous opportunities and severe risks. If such advances allow us to colonize other planets, the stakes will become truly astronomical – the observable universe contains more star systems than all the grains of sand on Earth. This makes it even more important that we will use this newfound power responsibly.

As we have seen, technological capacity combined with moral indifference can lead to a moral catastrophe. A future development akin to factory farming might cause suffering on an astronomical scale, vastly exceeding anything we’ve done so far. Such events are called s-risks (an abbreviation of “suffering risks” or “risks of astronomical suffering”).

#### That exports astronomical wild animal suffering throughout the Universe---outweighs

Bruers 18 – Stijn Bruers, Professor in the Department of Philosophy and Moral Sciences at Ghent University, PhD in Physics and PhD in Moral Philosophy, “My Cause Prioritization”, 2-15, https://stijnbruers.wordpress.com/2018/02/15/my-cause-prioritization/

Welfare biology

Because at least some people choose a conditional maximum as their reference preference, we have to give some weight to the person affecting view in population ethics. In that case, we have a priority to avoid the existence of individuals with lives not worth living. Here we face the problem of wild animal suffering. It is possible that some animals in nature have lives not worth living, because their lives are full of negative experiences due to hunger, diseases, injuries, parasites and predators. Especially the animals with an r-selection reproductive strategy have a problem: these animals have a lot of offspring (the population has a high rate of reproduction, hence the name ‘r-selection’), and only a few of them survive long enough to reproduce themselves. Most lives of those animals are very short and probably miserable. We are not likely to see the majority of those animals, because they will die and be eaten quickly.

A better reproductive strategy in terms of well-being, is K-selection: having few offspring with long lives and high survival rates. If a life is long, it is more likely to be positive because it has proportionally fewer negative experiences of hunger or deadly diseases. Only humans are very close to a perfect K-selection: the average fertility rate of a woman is 2,5 children, and this rate is decreasing and expected to reach 2 children in the second halve of this century. When it reaches 2 children per woman, and when all children survive till they reproduce, the human population becomes stable. Every human can have a full live. (As lifespan increases, the fertility rate can drop below 2 children per woman.)

According to the person affecting view, we have to give priority to avoiding r-selection and promoting K-selection. Perhaps with genetic manipulation (e.g. gene drives), we can turn every population into K-selection (where female animals have on average two offspring) and make sure that all animals have long healthy lives. But for the moment, only humans are about to reach the ideal K-selection reproduction.

Healthy humans have other advantages: they have complex preferences and strong personal identities over time, which means they can have potentially high levels of lifetime well-being when their preferences are satisfied. So it is possible that humans can have larger relative preferences than non-human animals. Most humans can also clearly communicate their preferences: it is easier to determine the levels of well-being of humans who can self-consciously think and speak than the levels of well-being of non-human animals who can only communicate their preferences in very indirect ways through behavior. Estimating the well-being or relative preferences of wild animals is very difficult and may require accurate brain scans. We can be very confident that the lives of healthy humans are worth living, but not confident at all that the life of an average wild animal is worth living.

The above implies that we can give a priority to saving and helping humans. This preference for healthy humans (increasing the relative number of healthy humans) is not speciesism, because the basic criteria to derive this preference (e.g. the level of personal identity over time, the level of communication and the level of K-selection) did not refer to species membership. The above discussion did not use the word ‘species’ at all. Given our current state of knowledge, a preference for healthy humans is most likely to satisfy the maximum relative preferences principle.

Pros and cons of human population growth

As explained above, helping humans means increasing K-selection in the world. The more individuals who belong to a K-selection population, the better. However, there are also problems with human population growth. More humans means more competition for scarce resources, more people who can invent dangerous technologies, more greenhouse gas emissions, higher likelihood of spreading of dangerous viruses. These things increase existential risks. But it can also mean more mutually beneficial situations through trade and cooperation, more inventions of good technologies, higher likelihood of resistance against dangerous viruses.

However, there is one very big disadvantage of giving priority to humans: most humans consume animal products. Buying animal products gives an incentive to breed animals who have lives not worth living in e.g. factory farms. Fighting poverty and promoting economic development might increase animal suffering: a $1,000 increase in per capita GDP in the poorest countries implies an increased consumption of 1.7 kg of meat per person per year. Saving the life of a human omnivore means a consumption of about 30 kg of meat.

It is difficult to estimate the total costs and benefits of further human population growth. Give the consumption of animal products, I tend towards the conclusion that decreasing human population growth is valuable, but only if it is done in a way that has other cobenefits. Avoiding unwanted pregnancies through family planning is the only strategy that has a lot of cobenefits in terms of women’s rights, health of newborn children, environmental impact reduction and poverty reduction. The benefit-cost ratio of family planning is high. This means that family planning may also be consistent with the total view in population ethics, even if fewer happy people might come into existence. Finally by reducing the fertility rate, family planning is a means to reach perfect K-selection. Therefore, I give a low priority to family planning by supporting organizations such as Marie Stopes International.

Cause area: veganism and antidiscrimination

As helping humans involves a risk of increasing animal suffering, I give a high priority to promoting veganism, animal rights and antispeciesism. According to some thought experiments, we can conclude that most animals in agriculture and aquaculture have lives not worth living, so creating those lives violates both the person affecting view and the total view in population ethics. Promoting veganism is a more neglected area than improving human health and well-being.

Furthermore, veganism also has many cobenefits in terms of improved human health: less chronic diseases due to healthier diets, less health impact from climate change due to lower greenhouse gas emissions, less malnutrition due to lower food prices for the poorest people, and less health risks from pollution, zoonotic viruses and antibiotic resistant bacteria.

Veganism also facilitates spreading the value of antidiscrimination. Speciesism is an example of discrimination. If people consume animal products, a cognitive dissonance prevents them from valuing animals as equal to humans. When they eat vegan, this cognitive dissonance diminishes and they are more open to the value of antispeciesism. The interspecies model of prejudice predicts that a decrease in speciesism results in a decrease in racism, i.e. a decrease of prejudice against other groups of people. Antispeciesism is also necessary to start scientific research about wild animal suffering and to find safe and effective means to intervene in nature to improve wild animal well-being. And finally, antispeciesism becomes important when it comes to the development of artificial general intelligence and superintelligence. If we create superintelligent AI machines and implement them with our own speciesist goals, even more animals can be exploited by AI machines for many years in the future.

The cause area of veganism is also relatively neglected and tractable, which means effective altruists have a lot of high impact opportunities in this area. Effective vegan advocacy, perhaps with deep canvassing, is promising. But clean meat, and more generally tissue engineering, appear to be very promising as well. With these technologies, we can create animal products without using animals. It might also be a crucial technology for wild animal suffering reduction, as it can provide a food alternative for predators. The tissue engineering technology can also be used to extend life and replace a lot of animal experimentation. Therefore, I support the Good Food Institute and to a lesser degree the Methuselah Foundation.

Catastrophic risks

There are several possible extinction risks (X-risks) where everyone dies: asteroid impacts, supervolcano eruptions, pandemic viruses, runaway global warming, global nuclear war, dangerous nanotechnology. According to the total view of population ethics, extinction of sentient and intelligent life is a tragedy, because it means a lot of future preference satisfaction (well-being, happiness) is lost. Hence, extinction prevention (X-risk reduction) gets a top priority.

From a person affecting view, extinction is less bad, because with extinction, non-existent future beings cannot complain and wild animals with lives not worth living will no longer be born, so future complaints will be avoided. Extinction is only bad for those of the current generations who value a continued existence in the far future, and especially for the last generation, because most extinction scenarios involve suffering when everyone dies.

But there is a class of catastrophic risks that is even worse than X-risks: S-risks or suffering risks, where the future contains huge populations of sentient beings with lives full of misery. This is worse than extinction, because an S-risk is terrible both from a total view as well as from a person affecting view.

An example of an S-risk is space colonization where we export wild animal suffering and livestock farming: the number of animals with lives not worth living will multiply when other planets are colonized. Before we start with space colonization, we should first adopt veganism and antispeciesist values such that we will not export and multiply animal suffering

#### Cosmogenesis is inevitable

Merali 17 – Dr. Zeeya Merali, PhD in Cosmology from Brown University, Master’s in Natural Sciences from the University of Cambridge, Freelance Journalist and Author Whose Work Has Appeared in Scientific American, Nature, New Scientist, and Discover, and on the BBC, “Scientists Want to Create a Universe in a Lab, And They Actually Could”, Futurism, 10-20, https://futurism.com/scientists-may-create-universe-actually-could

Physicists aren’t often reprimanded for using risqué humour in their academic writings, but in 1991 that is exactly what happened to the cosmologist Andrei Linde at Stanford University. He had submitted a draft article entitled ‘Hard Art of the Universe Creation’ to the journal Nuclear Physics B. In it, he outlined the possibility of creating a universe in a laboratory: a whole new cosmos that might one day evolve its own stars, planets and intelligent life. Near the end, Linde made a seemingly flippant suggestion that our Universe itself might have been knocked together by an alien ‘physicist hacker’. The paper’s referees objected to this ‘dirty joke’; religious people might be offended that scientists were aiming to steal the feat of universe-making out of the hands of God, they worried. Linde changed the paper’s title and abstract but held firm over the line that our Universe could have been made by an alien scientist. ‘I am not so sure that this is just a joke,’ he told me.

Fast-forward a quarter of a century, and the notion of universe-making – or ‘cosmogenesis’ as I dub it – seems less comical than ever. I’ve travelled the world talking to physicists who take the concept seriously, and who have even sketched out rough blueprints for how humanity might one day achieve it. Linde’s referees might have been right to be concerned, but they were asking the wrong questions. The issue is not who might be offended by cosmogenesis, but what would happen if it were truly possible. How would we handle the theological implications? What moral responsibilities would come with fallible humans taking on the role of cosmic creators?

Theoretical physicists have grappled for years with related questions as part of their considerations of how our own Universe began. In the 1980s, the cosmologist Alex Vilenkin at Tufts University in Massachusetts came up with a mechanism through which the laws of quantum mechanics could have generated an inflating universe from a state in which there was no time, no space and no matter. There’s an established principle in quantum theory that pairs of particles can spontaneously, momentarily pop out of empty space. Vilenkin took this notion a step further, arguing that quantum rules could also enable a minuscule bubble of space itself to burst into being from nothing, with the impetus to then inflate to astronomical scales. Our cosmos could thus have been burped into being by the laws of physics alone. To Vilenkin, this result put an end to the question of what came before the Big Bang: nothing. Many cosmologists have made peace with the notion of a universe without a prime mover, divine or otherwise.

#### That causes infinite suffering

Tomasik 17 – Brian Tomasik, Researcher, Cofounder and Advisor at the Foundational Research Institute, BS in Computer Science from Swarthmore College, Former Research Assistant at the University of Pennsylvania, Former Software Development Engineer II at Microsoft, “Lab Universes: Creating Infinite Suffering”, Essays on Reducing Suffering, 6-16, https://reducing-suffering.org/lab-universes-creating-infinite-suffering/

Background on lab universes

Some physical theories predict that it may be possible to create new, "baby" universes out of a small amount of matter. Technical reviews of the topic can be found in Stefano Ansoldi and Eduardo I. Guendelman, "Child Universes in the Laboratory," and Gordon McCabe, "How to Create a Universe." Popular-level introductions include the following:A Swarm of Ancient Stars - GPN-2000-000930

--Jim Holt, "The Big Lab Experiment," Slate, 2004

--Zeeya Merali, "Create Your Own Universe," New Scientist, 2006

--Robert Krulwich, "Build Your Own Universe," NPR, 2006.

McCabe explained the concept clearly (p. 6):

Now, one of the most intriguing possibilities opened up by inflation, is the possible creation of a universe 'in a laboratory'. Creation in a laboratory is taken to mean the creation of a physical universe, by design, using the 'artificial' means available to an intelligent species. It is the ability of inflation to maintain a constant energy density, in combination with a period of exponential expansion, which is the key to these laboratory creation scenarios. The idea is to use a small amount of matter in the laboratory, and induce it to undergo inflation until its volume is comparable to that of our own observable universe. The energy density of the inflating region remains constant, and because it becomes the energy density of a huge region, the inflating region acquires a huge total (non-gravitational) energy.

Andrei Linde, one of the founders of inflationary cosmology, put it this way (p. 8):

Indeed, one may need to have only a milligram of matter in a vacuum-like exponentially expanding state, and then the process of self-reproduction will create from this matter not one universe but infinitely many!

Another pioneer of inflation is Alan Guth, the subject of a 1987 New York Times article:

PHYSICISTS often probe the workings of nature on a cosmic scale, but Prof. Alan H. Guth and his colleagues at the Massachusetts Institute of Technology may have set themselves the ultimate research goal. They are seeking a mechanism by which humans might create a new universe from scratch.

Outrageous though such a notion may be, Dr. Guth and his collaborators are perfectly serious about their investigation. "Ten years ago, we couldn't even have posed the question of whether a man-made universe would be possible," he said. "But physics has progressed a long way since then, and today we can ask this and related questions in the real hope of finding scientifically testable answers. We are working in a new and exciting environment."

In his 1997 book, The Inflationary Universe (pp. 268-69), Guth wrote:

To put the story in perspective, one should remember that the process of eternal inflation [postulated by the theory of the self-reproducing inflationary universe ...] leads to an exponential increase in the number of pocket universes on time scales as short as 10-37 seconds. Since the time needed for the development of a super-advanced civilization is measured in billions of years or more, there appears to be no chance that laboratory production of universes could compete with the "natural" process of eternal inflation.

On the other hand, a child universe created in a laboratory by a super-advanced civilization would set into motion its own progression of eternal inflation. Could the super-advanced civilization find a way to enhance its efficiency? We may have to wait a few billion years to find out.

Infinite suffering

Starting a chain of eternal inflation in the laboratory would produce infinitely many new universes. But what types of universes would emerge? Suppose we assume -- as do Jaume Garriga and Alex Vilenkin in their 2001 article "Many worlds in one" -- that there are only finitely many possible universe histories of a particular duration (say, 13.7 billion years, the age of our universe); call these "histories" for short. The existence of infinitely many universes needn't, in general, imply the existence of all possible histories. As Alex Vilenkin notes in his 2006 book Many Worlds in One, the sequence 1, 3, 5, 7, ... contains infinitely many integers but doesn't contain all possible integers, and one might imagine an analogous situation for universe histories (p. 114). However, because "the initial conditions at the big bang are set by random quantum processes during inflation" (p. 114), the theory of inflation does imply that lab universes would instantiate all possible histories infinitely many times (with probability one -- see the second Borel-Cantelli lemma). This would, of course, include infinitely many replications of the Holocaust, infinitely many acts of torture, and so on. Indeed, there would be infinitely many universes in which Hitler won World War II, as well as infinitely many universes that would be as close as physically possible to "hell on earth" (or on any other planet). The assumption of finitely many possible histories is not really important. As long as we assume that the probability is greater than zero that suffering will emerge in a random universe, creating infinitely many universes would create infinite amounts of suffering.

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)