# Speech 1NC TFA Rd 2 vs Carnegie Vanguard 3-10 10AM

## 1

#### Interpretation: At all TOC bid distributing tournaments, debaters must disclose all constructive speech docs open source with highlighting on the NDCA LD wiki within an hour after debating.

#### Violation – you didn’t – I have screenshots

Table

Description automatically generated

Graphical user interface, application

Description automatically generated with medium confidence

#### A. Debate resource inequities—you’ll say people will steal cards, but that’s good—it’s the only way to truly level the playing field for students such as novices in under-privileged programs.

Antonucci 5 [Michael (Debate coach for Georgetown; former coach for Lexington High School); “[eDebate] open source? resp to Morris”; December 8; http://www.ndtceda.com/pipermail/edebate/2005-December/064806.html //nick]

a. Open source systems are preferable to the various punishment proposals in circulation. It's better to share the wealth than limit production or participation. Various flavors of argument communism appeal to different people, but banning interesting or useful research(ers) seems like the most destructive solution possible. Indeed, open systems may be the only structural, rule-based answer to resource inequities. Every other proposal I've seen obviously fails at the level of enforcement. Revenue sharing (illegal), salary caps (unenforceable and possibly illegal) and personnel restrictions (circumvented faster than you can say 'information is fungible') don't work. This would - for better or worse. b. With the help of a middling competent archivist, an open source system would reduce entry barriers. This is especially true on the novice or JV level. Young teams could plausibly subsist entirely on a diet of scavenged arguments. A novice team might not wish to do so, but the option can't hurt. c. An open source system would fundamentally change the evidence economy without targetting anyone or putting anyone out of a job. It seems much smarter (and less bilious) to change the value of a professional card-cutter's work than send the KGB after specific counter-revolutionary teams.

#### B. Evidence ethics – open source is the only way to verify before round that cards aren’t miscut – otherwise you could have highlighted unethically. That’s a voter – maintaining ethical ev practices is key to being good academics and we should be able to verify you didn’t cheat

#### C. Depth of clash – open source allows debaters to come up with more nuanced researched objections to their opponents evidence before the round at a much faster rate, which leads to the highest quality evidence comparison instead of guessing what was highlighted

## 2

#### interp - the aff must use the free press as the actor.

#### violation - they say democracy and fiat a governmental action, not the free press

#### limits -- it arbitrarily adds a verb to the resolution which is infinitely unpredictable because they can choose any action since it isn't bound by the resolution

#### Ground - skirts core topic generics of objective freepress good/bad by shifting it to policy actions that allow them to fiat cherrypicked policies that don't have predictable responses

#### Independently bad bc plan text vs cx

#### Fairness – it’s a prereq to judge evaluation and substantive engagement

#### Education – it’s the only portable impact and why schools fund debate

#### CI – a) brightlines are arbitrary and self-serving which doesn’t set good norms b) it collapses since weighing between brightlines rely on offense defense

#### DTD – its key to deter future abuse and the abuse has already occurred

#### No RVI’s- a) chilling effect – people will be too scared to read theory because RVI’s encourage baiting theory b) clash – people go all in on theory which decks substance engagement c[ logic

#### 1NC theory first - 1] Abuse was self-inflicted- They started the chain of abuse and forced me down this strategy 2] Norming- We have more speeches to norm over whether it’s a good idea since the shell was read earlier. Norming outweighs A] Constutivism- It’s the constitutive purpose of theory debating B] Sequencing- it’s a pre-requisite to actualizing any other voter like fairness or education

## 3

#### The role of the ballot is to *evaluate the desirability of resolutional action under the best normative framework*. it’s key to framework clash and phil ed is the only reason LD debate exists.

#### No New 1AR ROB – a] time skew b] shiftiness

#### Presumption and permissibility negates – a) more often false than true since I can prove something false in infinite ways b) real world policies require positive justification before being adopted – there’s alwahys an institutional DA to going through Congress c) ought[[1]](#footnote-1) means “moral obligation” so the lack of that obligation means the aff hasn’t fulfilled their burden d) resolved[[2]](#footnote-2) indicates “firmly determined” which means they proactively did something, to negate that means that they aren’t resolved e) permissibility can’t affirm since then anything would be ok which would justify racism – we should be safe and do nothing

#### The litmus test for ethics is certainty and non-arbitrariness – blurry guidelines for ethics allows agents to inconsistently understand morality or arbitrarily opt out which renders ethics useless since it can’t serve as a guide to action.

#### Thus, the meta-ethic is practical reason.

#### 1] Empirical Uncertainty – only intrinsic and a priori truths like 1+1=2 are certain for agents – relying on the empirics is incoherent because different agents have different interpretations of history, have access contrasting forms of information, or rely on inconsistent methods for calculation but practical reason is universal and applies to all agents

#### 2] Causal Determinism – the physical world removes culpability from the agent – one only does an action because of an antecedent cause or stimulus but isn’t a result of their will – only the a priori world assumes a rational and free agent not subject to physical side constraints.

#### 3] Infinite Regress – certainty must answer “why” because it would otherwise allow agents to infinitely question why it’s true – other frameworks allow agents to question every part of it, but questioning reason concedes its authority which proves its inescapable.

#### That justifies universal laws of morality.

#### 1] Principle of Equality – there’s no distinction between practical reasoners – its incoherent to claim that 1+1=2 just for me.

#### 2] Particularism justifies treating agents differently and not valuing their moral worth – justifies any norm which fails as a guide to action.

#### Thus, the standard is *consistency with universalizable maxims* – actions are ethical insofar as willing it doesn’t infringe on the ability to will it.

#### 1] Performativity – when you enter debate, you presume that you will be free to set and pursue ends in the round because of a system of reciprocally enforced constraints.

#### 2] Epistemic Confidence – a] modesty is arbitrary in calculating ethical value b] self-defeating – you wouldn’t take two different pills because a doctor recommended one and a stranger another

#### 3] TJF – it doesn’t matter how true a philosophy is if it can’t be engaged or is impossible to learn from – even if a theory was correct, we shouldn’t use its philosophy in debate specifically.

#### a] Resource Disparities – intent based frameworks ensure big squads don’t have a comparative advantage since debates become about quality of arguments rather than quantity and require a higher level of analytic thinking that small schools have.

#### b] Phil Ed – only intent based FW allows us to interrogate philosophical concepts like ideas of rights or a priori truths – other events allow for policymaking but only LD gives us a UQ inroad to phil.

#### c] JOURNALISTS CAN’T USE UTIL, PREFER DUTY BASED ETHICS

Christians 7 Christians, Clifford (Research Professor of Comunications, Professor of Journalism and Professor of Media Studies Emeritus at the University of Illinois Urbana-Champaign) "Utilitarianism in media ethics and its discontents." Journal of Mass Media Ethics 22.2-3 (2007): 113-131.

Utilitarian ethics has major weaknesses, despite its democratic appeal. It depends on assessing the consequences accurately, when in everyday affairs the results of our choices are often unknown, at least in the long term. Blogging is a revolution in journalism at present, but how can we calculate all the changes even a decade from now? The short-term benefits of exposing corruption in a political campaign may be offset by long-term negative consequences—public hostility to an overly aggressive press. The results are frequently complicated and intertwined so that a theory staking itself on results often does not provide adequate guidelines for morally acceptable action. Among moral philosophers, the most influential critique of utilitarianism has been developed by W. David Ross.9 Ross argued against the utilitarian claim that others are morally significant to us only when our actions impact them pro or con (1930, pp. 17–21).10 We usually find ourselves confronting more than one moral claim at the same time involving different ethical principles. Asking only what produces the most good is too limiting. It does not cover the ordinary range of human relationships and circumstances. People recognize promise keeping, equal distribution, nonviolence, and preventing injury as moral principles. In various situations any of them might be the most stringent. Ordinary moral sensitivities suggest that when someone fulfills a promise because he thinks he ought to do so, it seems clear that he does so with no thought of its total consequences:: : : What makes him think it’s right to act in a certain way is the fact that he has promised to do so—that and, usually, nothing more. (Ross, 1930, p. 17) Utilitarianism as a single-consideration theory does not simply demand that we maximize general happiness, but renders irrelevant other moral imperatives that conflict with it. As Charles Taylor argued, the exactness of this one-factor model is appealing, but represents only ‘‘a semblance of validity’’ by leaving out whatever cannot be calculated (Taylor, 1982, p. 143; cf. Bowers, 2002). In some media situations, consequences are a reliable guide. But in many of the most crucial issues we face at present, utility is not adequate—for understanding distributive justice, diversity in popular culture, violence in television and cinema, truth telling, digital manipulation, conflict of interest, and so forth. We face the anomaly that the ethical system most entrenched in the media industry is not ideally suited for resolving its most persistent headaches. In an ethics of consequences, ‘‘only the future counts with respect to what is morally significant, and not the past’’ (Dyck, 1977, p. 60). Future results, even though they are hypothetical, are determinative. But why should possible benefits in the future count more, for example, than gratitude to parents for their deeds of the past? If I made a promise in the pxast, for instance, this moral duty would be the most urgent in the present. If my previous acts have harmed someone, I have a duty of reparation, that is, making up for earlier wrongs. There are duties of justice that require us to ignore or even upset the balance of happiness (Ross, 1930, p. 21). Thus an ethics of duty is a more compelling model of moral decision making. It covers the entire time frame rather than only anticipating future effects. Duty responds to a broader range of human experiences and relations. Duty recognizes that the human community requires dutiful actions to maintain its humanness. H. Richard Niebuhr, in fact, saw responsibility as inherent in our personhood. Our selfhood is manifest in the action of answering. Our relation to other selves carries moral obligation; we respond to responders; we live in responsive relations (1963, pp. 59–61, 152–160). With a similar understanding of humans as responsible agents, Emmanuel Levinas (1981) insisted that our duties to others are more fundamental to human identity than are individual rights. An ethics of duty provides a critical framework that prevents us from having our ethical theory and democratic practice slide into one another. In terms of the overall task of developing a theoretically credible media ethics, the most promising direction is a deontological one.

#### Negate –

#### [1] Objectivity censors’ journalists’ personal views and biases- that’s non universalizable

Greven 21 Greven, Alec, "Speech and Sovereignty: A Kantian Defense of Freedom of Expression" (2021). Honors Theses. 1579.  
https://scholarship.richmond.edu/honors-theses/1579 Karan

I will now outline the value of communication. The capacity to effectively communicate with others is crucial for an agent to realize their distinct ends, projects, and values. All agents need to will a world in which the value of communication is preserved in order to realize their ends. Lying and censorship are two actions that subvert the value of communication. Thus, engaging in lying and censorship is usually a hypocritical action that commits an agent to a practical contradiction. It simultaneously commits an agent to a principle that the value of communication in the world should be preserved while performing actions that subvert the value of communication. If everyone lied and censored at will then the structure of communication that the agent is practically committed to would collapse. Therefore, the liar or censor makes themselves an exception to a rule which is hypocritical and fails to respect the unity of their agency and treat others with equal moral standing.

#### [2] Journalists are required to respect those they report on, thus, advocacy journalism is required to alleviate suffering

Leshilo 18 Thabo Leshilo [A research report submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Arts, Applied Ethics for Professionals.] “Morality and Journalists: Objectivity versus Duty of Care” 13 July 2018, Johannesburg https://wiredspace.wits.ac.za/bitstream/handle/10539/26530/Morality%20and%20Journalists%20(markup)\_2.pdf?sequence=1

My view is that Detached Kevin Carter used the Sudanese child as a mere means to fame and (some mini-) fortune by simply photographing her and selling her photo; he did not treat her as a human being worthy of respect when he failed to come to her aid. In another formulation of the Categorical Imperative, Kant expresses the universal imperative of duty thus: “Act as though the maxim of your action were to become, through your will, a universal law of nature” ([1785] 2005, 24). The word ‘maxim’ refers to the basis on which one acts: what informs one’s action. What, indeed, would become of the world if all of us were to refuse to help people facing great hardship the way (some) journalists claim to be entitled to do? Kant also implores us to act beneficently, and might as well have had the Detached Kevin Carter in mind when he admonishes someone in a position to help, who does not: What concern of mine is it? Let each one be as happy as heaven wills, or as he can make himself; I won’t take anything from him or even envy him; but I have no desire to contribute to his welfare or help him in time of need. (25) According to Kant, although it is possible that a maxim such as the one quoted above should be a universal law of nature “it is impossible to will that it [be] so . . . [f]or a will that brought that about would conflict with itself, since instances can often arise in which the person in question would need the love and sympathy of others, and he would have no hope of getting the help he desires, being robbed of it by this law of nature springing from his own will” (ibid.). Expanding on this, Charles Fried (2007,206) says that we are all required to recognise that human beings have certain basic rights to which they are all entitled as human beings: These rights are subject to qualification only in order to ensure equal protection of the same rights in others. In this sense the view is Kantian; it requires recognition of persons as ends, and forbids the overriding of their most fundamental interests for the purpose of maximizing the happiness or welfare of others. (ibib.) Fried goes on to say that this recognition that all humans have moral entitlements, correlates with the concept of respect – the attitude which is manifested when a person observes the constraints of the principle of morality in his dealings with another person, and thus respects the basic rights of the other. Respect is also an attitude which may be taken in part as defining the concept of a person: persons are those who are obliged to observe the constraints of the principle of morality in their dealings with each other, and thus show respect towards each other. (207) On Kant’s account, a person commands respect by virtue of being a rational being. “I maintain that man – and in general every rational being – exists as an end in himself and not merely as a means to be used by this or that at its discretion” ([1785] 2005, 28). I argue that Kant’s ‘Formula of the End in Itself’ (or ‘Principle of Humanity’) compels journalists to go the extra mile to help alleviate the suffering of those that they report on, and even take action to save their lives. When they fail to do that and instead simply report on such plight with the clinical detachment displayed by Detached Kevin Carter towards the Sudanese child, they simply use their subjects as mere means to make money and build their careers. By acting this way, journalists act unjustly and wrongfully. That is because a victim of such tragedy would ordinarily expect another human being to help to alleviate his or her suffering.

#### Interp: affs must not read new offense in the 1ar related to a new fw, weigh aff arguments under our fw, recontextualize aff arguments under a different fw, or turn the 1nc fw.

#### Vote for Phil Clash and Time Skew- anything else allows them to concede all our framework interactions and just go for 4 minutes of turns against our NC

# AC

## Warming

### defense

#### No Extinction from Warming – new studies prove over-hype and tech solves.

* Extinction Tipping Point is implausible – we’re on track for 3 degrees, not 4-5 degrees
* Tech and Energy Modernization Solve – Renewable Energy is replacing Fossil Fuels which reduces Climate Mortality by a rate of 5.

Nordhaus 20 Ted Nordhaus 1-23-2020 “Ignore the Fake Climate Debate” <https://www.wsj.com/articles/ignore-the-fake-climate-debate-11579795816>, found by BPS, (American author, environmental policy expert, and the director of research at The Breakthrough Institute, citing new climate change forecasts)//Re-cut by Elmer

Beyond the headlines and social media, where Greta Thunberg, Donald Trump and the online armies of climate “alarmists” and “deniers” do battle, there is a real climate debate bubbling along in scientific journals, conferences and, occasionally, even in the halls of Congress. It gets a lot less attention than the boisterous and fake debate that dominates our public discourse, but it is much more relevant to how the world might actually address the problem. In the real climate debate, no one denies the relationship between human emissions of greenhouse gases and a warming climate. Instead, the disagreement comes down to different views of climate risk in the face of multiple, cascading uncertainties. On one side of the debate are optimists, who believe that, with improving technology and greater affluence, our societies will prove quite adaptable to a changing climate. On the other side are pessimists, who are more concerned about the risks associated with rapid, large-scale and poorly understood transformations of the climate system. But most pessimists do not believe that runaway climate change or a hothouse earth are plausible scenarios, much less that human extinction is imminent. And most optimists recognize a need for policies to address climate change, even if they don’t support the radical measures that Ms. Thunberg and others have demanded. In the fake climate debate, both sides agree that economic growth and reduced emissions vary inversely; it’s a zero-sum game. In the real debate, the relationship is much more complicated. Long-term economic growth is associated with both rising per capita energy consumption and slower population growth. For this reason, as the world continues to get richer, higher per capita energy consumption is likely to be offset by a lower population. A richer world will also likely be more technologically advanced, which means that energy consumption should be less carbon-intensive than it would be in a poorer, less technologically advanced future. In fact, a number of the high-emissions scenarios produced by the United Nations Intergovernmental Panel on Climate Change involve futures in which the world is relatively poor and populous and less technologically advanced. Affluent, developed societies are also much better equipped to respond to climate extremes and natural disasters. That’s why natural disasters kill and displace many more people in poor societies than in rich ones. It’s not just seawalls and flood channels that make us resilient; it’s air conditioning and refrigeration, modern transportation and communications networks, early warning systems, first responders and public health bureaucracies. New research published in the journal Global Environmental Change finds that global economic growth over the last decade has reduced climate mortality by a factor of five, with the **greatest benefits documented in the poorest nations.** In low-lying Bangladesh, 300,000 people died in Cyclone Bhola in 1970, when 80% of the population lived in extreme poverty. In 2019, with less than 20% of the population living in extreme poverty, Cyclone Fani killed just five people. “Poor nations are most vulnerable to a changing climate. The fastest way to reduce that vulnerability is through economic development.” So while it is true that poor nations are most vulnerable to a changing climate, it is also true that the fastest way to reduce that vulnerability is through economic development, which requires infrastructure and industrialization. Those activities, in turn, require cement, steel, process heat and chemical inputs, all of which are impossible to produce today without fossil fuels. For this and other reasons, the world is unlikely to cut emissions fast enough to stabilize global temperatures at less than 2 degrees above pre-industrial levels, the long-standing international target, much less 1.5 degrees, as many activists now demand. But recent forecasts also suggest that many of the worst-case climate scenarios produced in the last decade, which assumed unbounded economic growth and fossil-fuel development, are also very unlikely. There is still substantial uncertainty about how sensitive global temperatures will be to higher emissions over the long-term. But the best estimates now suggest that the world is on track for 3 degrees of warming by the end of this century, not 4 or 5 degrees as was once feared. That is due in part to slower economic growth in the wake of the global financial crisis, but also to decades of technology policy and energy-modernization efforts. “We have better and cleaner technologies available today because policy-makers in the U.S. and elsewhere set out to develop those technologies.” The energy intensity of the global economy continues to fall. Lower-carbon natural gas **has** displaced coal **as the primary source of new fossil energy**. The falling cost of wind and solar energy has begun to have an effect on the growth of fossil fuels. Even nuclear energy has made a modest comeback in Asia.

#### [Aff] studies about CO2 impact are exaggerated

* peer-reviewed journal shows IPCC exaggeration
* history proves resilience
* no extinction- warming under Paris goals
* rock breaking strategy could offset warming

IBD 18 Investors Business Daily 4-25-2018 “Here's One Global Warming Study Nobody Wants You To See” <https://www.investors.com/politics/editorials/global-warming-computer-models-co2-emissions/> (Citing Study from Peer reviewed journal by Lewis and Curry)//Re-cut by Elmer

Settled Science: A new study published in a peer-reviewed journal finds that climate models exaggerate the global **warming from CO2** emissions by as much as 45%. If these findings hold true, it's huge news. No wonder the mainstream press is ignoring it. In the study, authors Nic Lewis and Judith Curry looked at actual temperature records and compared them with climate change computer models. What they found is that the planet has shown itself to be far less sensitive to increases in CO2 than the climate models say. As a result, they say, the planet will warm less than the models predict, even if we continue pumping CO2 into the atmosphere. As Lewis explains: "Our results imply that, for any future emissions scenario, future warming is likely to be substantially lower than the central computer model-simulated level projected by the (United Nations Intergovernmental Panel on Climate Change), and highly unlikely to exceed that level. How much lower? Lewis and Curry say that their findings show temperature increases will be 30%-45% lower than the climate models say. If they are right, then there's little to worry about, even if we don't drastically reduce CO2 emissions. The planet will warm from human activity, but not nearly enough to cause the sort of end-of-the-world calamities we keep hearing about. In fact, the resulting warming would be below the target set at the Paris agreement. This would be tremendously good news. The fact that the Lewis and Curry study appears in the peer-reviewed American Meteorological Society's Journal of Climate lends credibility to their findings. This is the same journal, after all, that recently published widely covered studies saying the Sahara has been growing and the climate boundary in central U.S. has shifted 140 miles to the east because of global warming. The Lewis and Curry findings come after another study, published in the prestigious journal Nature, that found the long-held view that a doubling of CO2 would boost global temperatures as much as 4.5 degrees Celsius was wrong**.** The most temperatures would likely climb is 3.4 degrees. It also follows a study published in Science, which found that **rocks** contain vast amounts of nitrogen that plants could use to grow and absorb more CO2, potentially **offsetting** at least some of the effects of CO2 emissions and reducing future temperature increases.

### 1NC – Arctic Shipping

#### Warming is key to better Arctic shipping routes

Hawkins et al. 16(Ed, Professor of climate science at University of Reading, Academic Lead for Public Engagement in Department of Meteorology, Principal Research Scientist in NCAS, PhD in astrophysics. Dr. Keith Haines: Head of Department for Research and Professor of Marine Informatics at University of Reading UK, MA in Natural Sciences from Churchill Cambridge, PhD in Dynamical Meteorology from Imperial College. Nathanael Melia: final year PhD student in studying Meteorology at University of Reading, “Sea ice decline and 21st century trans-Arctic shipping routes,” <http://onlinelibrary.wiley.com.proxy.lib.umich.edu/doi/10.1002/2016GL069315/full>) //BS 1-22-2017

The Arctic is in transition to a seasonally ice-free state, increasing economic opportunities to a niche commercial shipping market, with the opening of new and faster trans-Arctic routes, and an extended shipping season. By utilizing these Arctic routes when accessible, and using traditional European routes via Suez (minimum of 30 days) otherwise, average journey times to East Asia may be dramatically reduced. Average transit times may decline going through the 21st century to 22 days under the low-emissions RCP2.6 scenario down to 17 days under high-emissions RCP8.5. Savings are less striking for North American routes because the distance saved via the Arctic relative to Panama is relatively modest. For a high-emissions scenario, by late century trans-Arctic shipping may be potentially commonplace, with a season ranging from 4 to 8 months. For a low-emissions scenario, with global mean temperature stabilization of less than 2°C above preindustrial, the frequency of open water vessel transits still has the potential to double by midcentury with a season ranging from 2 to 4 months. These transit time differences are the potential average savings a shipping company would experience if they were to utilize trans-Arctic routes at every possible opportunity. The results have different implications depending on the destination port; for example, Arctic routes are slightly less advantageous for the more southerly port of Shanghai. For European voyages, trans-Arctic routes are faster when available as even using switch transit routes via the NWP is always considerably faster than traditional routes via Suez. For North American traffic, however, switch transits using the NSR actually take longer than traditional routes via Panama. Assuming efficient passage and short queues through the Canal, North American shipping is likely to stick to the Panama route. To make these decisions, however, requires detailed knowledge of the SIT at least a week in advance. Products like CryoSat-2 near-teal-time SIT, typically available 1–3 days after satellite acquisition [Tilling et al., 2016], could help with forecasts at shorter lead times. The reduced transit times could lead to significant savings from increased voyage turnover and lower costs, in addition to potentially reducing global shipping emissions. As the TSR is the fastest and shortest route, and avoids Russian NSR tariffs, it may become an attractive alternative in the future. Companies wishing to utilize Arctic routes face choices about whether to invest in technologically advanced ice-capable ships enabling a longer and more reliable shipping season (Figure 4). These choices should consider the changing Arctic environment and the risks and opportunities this will offer. In addition to the dramatic changes to the sea ice pack, climate change is likely to modify other climatic hazards to shipping not assessed here such as ice ridging, fog, waves, and icing as discussed by Aksenov et al. [2015]; developing the full potential for trans-Arctic shipping will require knowledge of these along with comprehensive en route infrastructure, providing incentives for substantial investment in Arctic regions. It should be noted that despite these climatic opportunities, economic studies are mixed as to whether trans-Arctic shipping will become a reality due to the vagaries and seasonal nature of Arctic navigation [Bensassi et al., 2016; Lasserre, 2014; Lasserre and Pelletier, 2011]. However, emergent natural resource extraction and an increasingly accessible Arctic Ocean may lead to an increase in destination shipping.

#### Arctic shipping allows for shorter routes and better planning which solves high prices and overcapacity – that’s the key internal link to competitiveness

Humpert and Raspotnik 12 (Malte Humpert- Executive Director of The Arctic Institute, graduate studies at Georgetown University included regime change in the Arctic, energy and security issues, and economic potential of Arctic shipping routes, and Andreas Raspotnik, Research Fellow at the University of Cologne, double PhD, “The Future of Arctic Shipping” October, 11, 2012, http://www.thearcticinstitute.org/2012/10/the-future-of-arctic-shipping.html)

Arctic sea ice is melting rapidly, and within the next decade the effects of global warming may transform the Polar region from an inaccessible frozen desert into a seasonally navigable ocean. The summer of 2011 saw a record 33 ships, carrying 850,000 tons of cargo navigate the Northern Sea Route (NSR) off Russia’s northern coast. This year’s shipping season may see up to 1.5 million tons of cargo, as Germany’s Alfred Wegener Institute predicts the NSR to be ice-free and passable for ships by early summer. The North West Passage (NWP), first ice-free in 2007, and the Transpolar Sea Route (TSR) may also open up to shipping traffic over the coming decades. An in-depth assessment of the viability of shipping along the TSR will be published in the upcoming Arctic Yearbook 2012, which will be available from the Northern Research Forum’s website from October 2012. The development of Arctic offshore hydrocarbon resources and related economic activities will also improve the integration of the Arctic economy in global trade patterns. Multi-year ice and the limited seasonal window for trans-Arctic voyages however, will for the foreseeable future remain formidable obstacles to the development of Arctic shipping and its economic viability. Trans-Arctic shipping routes will thus not serve as a substitute for existing shipping lanes, but will instead provide new and additional capacity for a growing transportation volume. A navigable Arctic Ocean? Summer ice extent has declined by 40 percent since satellite observation began in 1979, and over the same period sea ice has thinned considerably, experiencing a decline in volume of 70 percent. Studies differ widely in their predictions of when summer sea ice will melt completely. The latest findings suggest that Arctic sea ice may have entered into a new state of low ice cover. A recent article by Valerie N. Livina and Timothy M. Lenton on the bifurcation of Arctic sea-ice cover describes it as "distinct from the normal state of seasonal sea ice variation." Arctic sea-ice may have crossed a tipping point which could soon make ice-free summers an annual feature across most of the Arctic Ocean. Longer ice-free periods A new study by the National Aeronautics and Space Administration (NASA) suggests that multi-year ice, which is the oldest and thickest Arctic sea ice and the principal obstacle to shipping in the Arctic Ocean, is disappearing at a faster rate than the younger and thinner ice. The ice-free period along the Arctic’s main shipping routes is expected to increase from around 30 days in 2010 to more than 120 days by the middle of the century. Furthermore, the distribution of the remaining summer ice will not be uniform across the Arctic Ocean. Studies suggest that sea ice will collect and persist longest along the northern flanks of the Canadian Archipelago and Greenland while the central and eastern part of the Arctic will see the most significant decline of ice, further extending the shipping season along the NSR. In 2011 the navigational season along the NSR lasted for 141 days, from early July until mid-November (see figure 1). Significant obstacles remain Nonetheless, significant obstacles to shipping remain such as icing from sea spray, wind chill, remoteness as well as their implications for rescue and emergency operations, and the lack of reliable weather forecasts. During the winter and spring months ice conditions along Arctic shipping routes will remain heavy, and the amount of floating sea ice and number of icebergs - a hazard to the safety of marine transport, may increase during the early melt season as more ice floes break apart and drift across the Arctic Ocean. Shorter sailing distances Routing shipping traffic through the Arctic allows for shorter sailing distances resulting in shorter trips. Shipping operators can achieve cost savings through a reduction of number of days at sea, energy efficiency improvements due to slower sailing speeds, or a combination of both. Distance savings along Arctic shipping routes can be as high as 40 percent compared to the traditional shipping lanes via the Suez Canal. Shorter sailing distances allow for considerable fuel cost savings. The reduced number of days at sea allows a ship to make more return trips resulting in increased revenue and potentially greater profits. Instead of realizing time savings, operators can also adopt super-slow sailing. A vessel traveling from Murmansk to Tokyo can reduce its speed by 40 percent and still arrive in Japan at the same time as a ship sailing at full speed traveling through the Suez Canal. Super-slow sailing can also double a vessel’s energy efficiency performance, resulting in a significant reduction of greenhouse-gas emissions. If a future emissions control framework was to include global maritime traffic, this reduction of emissions could thus also result in significant cost savings. Economic feasibility of Arctic shipping Global shipping operations are dependent on three key factors: predictability, punctuality, and economy-of-scale, all of which are currently limited in Arctic shipping. Consequently, the lack of schedule reliability and highly variable transit times along the Arctic shipping routes represent major obstacles to the development of Arctic shipping. The majority of cargo ships that travel the world’s oceans operate on regular schedules, known as liner service. In total more than 6,000 ships, most of them container ships, follow a set route calling at a number of ports to load and unload cargo, which consequently supplies the concerned country’s hinterland. Profitability can only be achieved with large- scale shipping based on stable and predictable (year-round) operations. The ability to schedule journeys a long time in advance and to guarantee uninterrupted service is considered key for container ship operators. Bulk dry and wet carriers, on the other hand, follow less predictable schedules and their routes depend more on changing supply and demand of less time- sensitive items. Of the four kinds of Arctic voyages undertaken in the Arctic Ocean - destination transport, intra-Arctic transport, trans-Arctic transport and cabotage - trans-Arctic shipping may face the most significant hurdle to becoming part of the global trade patterns. Draft and beam restrictions Arctic shipping routes, especially the NSR, are subject to significant draft and beam restrictions. Ships along the NSR must pass through a number of narrow and shallow straits in the Kara and Laptev Sea. The Yugorskiy Shar Strait at the southernmost entrance from the Barents to the Kara Sea follows a channel 21 nautical miles long and 12-30 meters deep. Along the eastern section of the NSR, ships must navigate either the Dmitry Laptev Strait or the Sannikov Strait to pass through the New Siberian Islands and travel from the Laptev to the East Siberian Seas.The eastern approach of the Laptev Strait has a depth of less than 10 meters, restricting the draft of ships to less than 6.7 meters. In addition, Russia’s government only permits ships with the highest ice classification—1A Finnish Swedish, to sail the route. Currently, only three vessels out of more than 2,000 Panamax ships have that classification. Arctic shipping infrastructure A key characteristic of Arctic shipping routes is the limited number of ports of call. According to the Arctic Logistics Information Office, 16 ports, most of them ice-covered for part of the year, are located along the NSR. The port of Murmansk and the port of Petropavlovsk on Russia’s far-east Kamchatka peninsula are considered essential for the development of the NSR. Both ports are expected to serve as terminals and hubs of the NSR. In November 2011 Vladimir Putin announced a major overhaul of the entire Russian transport system with special attention to maritime traffic in the Arctic. Russia plans to build up to 10 emergency centers focused on meteorological and rescue services as well as border patrol along the NSR.The capacity of Russia’s seaports is scheduled to increase 50 percent by 2015 and the country plans to invest 134 rubles (€3.4 billion) into developing maritime traffic over the next 10 years. The port of Kirkenes, Norway and the port of Vopnafjörður, Iceland may serve as major future Arctic hubs. Iceland’s strategic location at the entrance and exit to the Arctic Ocean and Vopnafjörður’s suitability as a deep-water port with depth up to 70m, may allow development into a transshipment hub. Future development and investment will however, depend significantly on the country’s financial and economic situation and foreign investments. Over the past decade China has continuously increased its economic cooperation with the small island nation and China’s premier Wen Jiabao recently visited Iceland to further strengthen the economic ties between the two countries. A Chinese delegation also visited the Faroe Islands, a small group of islands under the sovereignty of the Kingdom of Denmark, where domestic policy makers have also identified the island’s role in future Arctic shipping as a priority. Conclusion Over the past decades the Arctic has witnessed a much faster than anticipated decline of sea ice and the continuation of this trend will transform the Arctic Ocean into a navigable seaway over the coming decades. Yet due to the region’s unique navigational and economic challenges Arctic shipping will, for the foreseeable future, only be cost effective for a limited number of operators.

#### That makes hegemonic decline inevitable – ends in war

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With the global financial system in serious trouble, is America's geostrategic dominance likely to diminish? If so, what would that mean? One immediate implication of the crisis that began on Wall Street and spread across the world is that the primary instruments of U.S. foreign policy will be crimped. The next president will face an entirely new and adverse fiscal position. Estimates of this year's federal budget deficit already show that it has jumped $237 billion from last year, to $407 billion. With families and businesses hurting, there will be calls for various and expensive domestic relief programs. In the face of this onrushing river of red ink, both Barack Obama and John McCain have been reluctant to lay out what portions of their programmatic wish list they might defer or delete. Only Joe Biden has suggested a possible reduction -- foreign aid. This would be one of the few popular cuts, but in budgetary terms it is a mere grain of sand. Still, Sen. Biden's comment hints at where we may be headed: toward a major reduction in America's world role, and perhaps even a new era of financially-induced isolationism. Pressures to cut defense spending, and to dodge the cost of waging two wars, already intense before this crisis, are likely to mount. Despite the success of the surge, the war in Iraq remains deeply unpopular. Precipitous withdrawal -- attractive to a sizable swath of the electorate before the financial implosion -- might well become even more popular with annual war bills running in the hundreds of billions. Protectionist sentiments are sure to grow stronger as jobs disappear in the coming slowdown. Even before our current woes, calls to save jobs by restricting imports had begun to gather support among many Democrats and some Republicans. In a prolonged recession, gale-force winds of protectionism will blow. Then there are the dolorous consequences of a potential collapse of the world's financial architecture. For decades now, Americans have enjoyed the advantages of being at the center of that system. The worldwide use of the dollar, and the stability of our economy, among other things, made it easier for us to run huge budget deficits, as we counted on foreigners to pick up the tab by buying dollar-denominated assets as a safe haven. Will this be possible in the future? Meanwhile, traditional foreign-policy challenges are multiplying. The threat from al Qaeda and Islamic terrorist affiliates has not been extinguished. Iran and North Korea are continuing on their bellicose paths, while Pakistan and Afghanistan are progressing smartly down the road to chaos. Russia's new militancy and China's seemingly relentless rise also give cause for concern. If America now tries to pull back from the world stage, it will leave a dangerous power vacuum. The stabilizing effects of our presence in Asia, our continuing commitment to Europe, and our position as defender of last resort for Middle East energy sources and supply lines could all be placed at risk. In such a scenario there are shades of the 1930s, when global trade and finance ground nearly to a halt, the peaceful democracies failed to cooperate, and aggressive powers led by the remorseless fanatics who rose up on the crest of economic disaster exploited their divisions. Today we run the risk that rogue states may choose to become ever more reckless with their nuclear toys, just at our moment of maximum vulnerability. The aftershocks of the financial crisis will almost certainly rock our principal strategic competitors even harder than they will rock us. The dramatic free fall of the Russian stock market has demonstrated the fragility of a state whose economic performance hinges on high oil prices, now driven down by the global slowdown. China is perhaps even more fragile, its economic growth depending heavily on foreign investment and access to foreign markets. Both will now be constricted, inflicting economic pain and perhaps even sparking unrest in a country where political legitimacy rests on progress in the long march to prosperity. None of this is good news if the authoritarian leaders of these countries seek to divert attention from internal travails with external adventures. As for our democratic friends, the present crisis comes when many European nations are struggling to deal with decades of anemic growth, sclerotic governance and an impending demographic crisis. Despite its past dynamism, Japan faces similar challenges. India is still in the early stages of its emergence as a world economic and geopolitical power. What does this all mean? There is no substitute for America on the world stage. The choice we have before us is between the potentially disastrous effects of disengagement and the stiff price tag of continued American leadership.

#### Nuke war causes extinction AND outweighs other existential risks

PND 16. internally citing Zbigniew Brzezinski, Council of Foreign Relations and former national security adviser to President Carter, Toon and Robock’s 2012 study on nuclear winter in the Bulletin of Atomic Scientists, Gareth Evans’ International Commission on Nuclear Non-proliferation and Disarmament Report, Congressional EMP studies, studies on nuclear winter by Seth Baum of the Global Catastrophic Risk Institute and Martin Hellman of Stanford University, and U.S. and Russian former Defense Secretaries and former heads of nuclear missile forces, brief submitted to the United Nations General Assembly, Open-Ended Working Group on nuclear risks. A/AC.286/NGO/13. 05-03-2016. <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/Documents/NGO13.pdf> //Re-cut by Elmer

Consequences human survival 12. Even if the 'other' side does NOT launch in response the smoke from 'their' burning cities (incinerated by 'us') will still make 'our' country (and the rest of the world) uninhabitable, potentially inducing global famine lasting up to decades. Toon and Robock note in ‘Self Assured Destruction’, in the Bulletin of Atomic Scientists 68/5, 2012, that: 13. “A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self assured destruction. Even a 'small' nuclear war between India and Pakistan, with each country detonating 50 Hiroshima-size atom bombs--only about 0.03 percent of the global nuclear arsenal's explosive power--as air bursts in urban areas, could produce so much smoke that temperatures would fall below those of the Little Ice Age of the fourteenth to nineteenth centuries, shortening the growing season around the world and threatening the global food supply. Furthermore, there would be massive ozone depletion, allowing more ultraviolet radiation to reach Earth's surface. Recent studies predict that agricultural production in parts of the United States and China would decline by about **20 percent** for four years, and by 10 percent for a decade.” 14. A conflagration involving USA/NATO forces and those of Russian federation would most likely cause the deaths of most/nearly all/all humans (and severely impact/extinguish other species) as well as destroying the delicate interwoven techno-structure on which latter-day 'civilization' has come to depend. Temperatures would drop to below those of the last ice-age for up to 30 years as a result of the lofting of up to 180 million tonnes of very black soot into the stratosphere where it would remain for decades. 15. Though human ingenuity and resilience shouldn't be underestimated, human survival itself is arguably problematic, to put it mildly, under a 2000+ warhead USA/Russian federation scenario. 16. The Joint Statement on Catastrophic Humanitarian Consequences signed October 2013 by 146 governments mentioned 'Human Survival' no less than 5 times. The most recent (December 2014) one gives it a highly prominent place. Gareth Evans’ ICNND (International Commission on Nuclear Non-proliferation and Disarmament) Report made it clear that it saw the threat posed by nuclear weapons use as one that at least threatens what we now call 'civilization' and that potentially threatens human survival with an immediacy that even climate change does not, though we can see the results of climate change here and now and of course the immediate post-nuclear results for Hiroshima and Nagasaki as well.

### 1NC – REM Mining

#### Energy switching causes extinction – resource mining

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To revisit the concept of stranded assets in regard to conventional fossil fuels, this notion is based upon the premise that conventional infrastructure and the associated commodity will become stranded following governments soon/eventual implementation of specific climate legislation [2] and/or increasingly stringent climate policies that would result in the commodity no longer being able to turn a profit– thus it would become stranded. Yet a stronger argument could be made for “clean” energy” infrastructure becoming stranded since it is also carbon based/dependent although this inconvenient truth remains unacknowledged in environmental circles. Consider the fact that climate science aside, humans are rapidly exhausting all Earth’s natural resources. (October, 2010: “…our demand on natural resources has doubled since 1966 and we’re using the equivalent of 1.5 planets to support our activities. If we continue living beyond the Earth’s limits, by 2030 we’ll need the equivalent of two planets’ productive capacity to meet our annual demands.”) And although this sounds ludicrous to the privileged who take most every aspect of the Earth’s life sources for granted, the warning is taken very seriously by the heads of NASA. Consider the response by Administrator of NASA, Charles Bolden speaking at the Humans to Mars summit: “If this species is to survive indefinitely we need to become a multi-planet species. We need to go to Mars, and Mars is a stepping stone to other solar systems.” (Note that the quest to place greenhouses on and colonize Mars is well underway. Thus, let us assume that to start, by 2020, just 4 short years away, the 60 trillion (needed for “clean” infrastructure alone) is raised. The task then becomes the companies creating this infrastructure fulfilling the promise of return on these investments by now building/creating the new global infrastructure. Unparalleled quantities of rare earth metals must be mined (by machines dependent on crude). The steel, copper, glass, as well as the energy required (and fossil fuels) to build infrastructure of this scale will be unprecedented. And it will generate massive growth as our Earth continues to be plundered. But what of the Earth’s resources being completely depleted by 2030 as predicted by scientists – what then of the sixty trillion dollar investment – with monetary returns no longer insight? These uncompleted infrastructures, due to depleted resources, will be, without doubt, stranded assets. It’s hard to believe we are going to use what little of Earth’s finite resources that remain to fulfil the promise of climate wealth, by building a new “clean energy” infrastructure, rather than radically conserving and attempting to nourish, what remains. Consider that a mere half of 1% of the total energy consumed in the U.S. is generated by wind, solar, biofuels, or geothermal heat. Despite much touted efforts in Germany, Spain, and China, globally, in 2013, 1.1% of the world’s total energy was provided by wind with only 0.2% by solar.[Source | Source] Thus, imagine the magnitude of infrastructure required to increase the world’s total energy from renewables up to even 50%. It is unfathomable. It is this promise of unparalleled growth (under the guise of sustainability) that has the insatiable capitalists circling the climate crisis like voracious vultures. Rubbing salt in the wound is the fact that this new infrastructure will serve the same people that have always had the energy – the same 1% (anyone who can afford to get on a plane) responsible for 50% of the global GHG emissions. To put this into perspective, consider that only 5% of the world’s population has ever flown. [Source] While many scientists, including NASA, note that the prospect that “global industrial civilisation could collapse in coming decades due to unsustainable resource exploitation and increasingly unequal wealth distribution”, the fact that sought after renewable systems such as solar thermal panels will not only push us towards this collapse but also, cannot exist outside of an industrialized civilization, appear to non-existent. The proverbial 8000 lb. elephant in the room is documented in a 2009 paper by professor of Atmospheric Studies at the University of Utah, Tim Garrett. Nov. 22, 2009: “In a provocative new study, a University of Utah scientist argues that rising carbon dioxide emissions – the major cause of global warming – cannot be stabilized unless the world’s economy collapses….” “But most centrally, alternative energy spectacles protect us from considering our own growth, in consumption and population, which could not otherwise come to a peaceful end within the logic of the current expansionist milieu.” — Conjuring Clean Energy: Exposing Green Assumptions in Media and Academia, February 13, 2015 Let’s Pretend But let’s pretend that Earth’s resources are infinite. It is assumed (foolishly) that fossil fuel power plants will be shut down once adequate solar and wind energy infrastructure is established. To date, there appears to be not a single example of a fossil fuel power plant that has closed, due to solar and wind. Under the industrialized capitalist system, logic conveys that this fact will not change in the future. In real life (not foundation financed campaigns that pander to public) the energy producers understand that all/any additional energy that may be produced via “renewables” will result in more energy to use/sell/waste and feed the engine of industrialized growth. This is the naked truth, which speaks to the very inconvenient truth upheld by the capitalist system. system. In a world built upon both denial and fantasy, techno-fetish made vogue, is the preferred choice. All non-ambient energy creates pollution and destruction, including renewables which are carbon based and dependent on carbon resources from cradle to grave – coupled with built-in obsolescence by design. Even when small or local in scale, renewable energy aids and abets growth, accelerates global warming, and contributes to further ecological destruction. Further ecological damage is caused by rare earth mining, as well as the acid drainage type mining for the necessary materials and special metals such as copper and lead. Added to this ecological devastation are the fossil fuels required/used for the mining and manufacturing of the renewable products and infrastructure. After the manufacturing they are transported using large-scale industrial equipment also dependent on crude. Finally, all these same resources are non-renewable. These very inconvenient facts are ignored. In a perfect world, in another time, perhaps renewable energies will be made of butterfly kisses and rare, precious Earth minerals will fall from the sky. University of California physics professor Tom Murphy has calculated that “the batteries required to store this electricity in the U.S. alone (otherwise no electricity at night or during cloudy or windless spells) would require about three times as much lead as geologists estimate may exist in all reserves, most of which remain unknown. If you count only the lead that we’ve actually discovered, Murphy explains, we only have 2% of the lead available for our national battery project. The number are even more disheartening if you try to substitute lithium ion or other systems now only in the research phase.” [Source] To not consider renewable energy infrastructures, global in scale, as equally contributing to growth, ecological destruction and climate change is willful blindness [EDIT: ignorance].. Such willful blindness is sought after and fervently embraced by the same 1% of the population that creates 50% of all global greenhouse gas emissions today. Considering the magnitude of the task before us, it is little wonder we prefer stories, in which we write the script with a storyline of our liking. Our frail egos do not accept there are consequences to having plundered our planet in which the outcome will be dictated by nature. “Debord wrote that “the society which rests on modern industry is not accidentally or superficially spectacular, it is fundamentally spectaclist.” Perhaps he could have spoken similarly about modern energy or modern environmentalism. Debord’s spectacle is a divine deity around which duty-bound citizens gravitate to chant objectives without reflecting upon fundamental goals. It’s all too easy for us to miss the limitations of alternative energy, Debord might say, as we drop to our knees at the foot of the clean energy spectacle, gasping in rapture. This oracle delivers a ready-made creed of ideals and objectives that are convenient to recite and that bear the authority of science. These handy notions of clean energy reflexively work into environmental discourse. And as we have seen here, productivist environmentalists enroll media to tattoo wind, solar and biofuels into the subcutaneous flesh of the environmental movement. In fact, these novelties come to define what it means to be an environmentalist.

### 1NC – Earthworms

#### CO2 is key to bolster Earthworm populations – solves the negative impacts of warming.

Idso 07 [Craig, Chairman of the Board for CSCDCG/BS in Agriculture from Arizona State, Jul, “CO2 Science,” www.wormdigest.org/content/view/426/2/]

Nematode populations increased significantly in response to the 32% increase in the air's CO2 concentration. Of the various feeding groups studied, Yeates et al. report that the relative increase "was lowest in bacterial-feeders (27%), slightly higher in plant (root) feeders (32%), while those with delicate stylets (or narrow lumens; plant-associated, fungal-feeding) increased more (52% and 57%, respectively)." The greatest nematode increases, however, were recorded among omnivores (97%) and predators (105%). Most dramatic of all, root-feeding populations of the Longidorus nematode taxon rose by a whopping 330%. Also increasing in abundance were earthworms: Aporrectodea caliginosa by 25% and Lumbricus rubellus by 58%. Enchytraeids, on the other hand, decreased in abundance, by approximately 30%. What are the ramifications of these observations? With respect to earthworms, Yeates et al. note that just as was found in the studies cited in the first part of this review, the introduction of lumbricids has been demonstrated to improve soil conditions in New Zealand pastures (Stockdill, 1982), which obviously helps pasture plants to grow better. Hence, the CO2-induced increase in earthworm numbers observed in Yeates et al.'s study would be expected to do more of the same, while the reduced abundance of enchytraeids they documented in the CO2-enriched pasture would supposedly lead to less carbon being released to the air from the soil, as per the known ability of enchytraeids to promote carbon loss from British peat lands under current temperatures. In summary, it would appear that the lowly earthworm and still lowlier soil nematodes respond to increases in the air's CO2 content, via a number of plant-mediated phenomena, in ways that further enhance the positive effects of atmospheric CO2 enrichment on plant growth and development, while at the same time helping to sequester more carbon more securely in the soil and thereby reducing the potential for CO2-induced global warming.

#### Decline of earthworms causes extinction

**Braun 09** (David Braun-director of outreach with the digital and social media team illuminating the National Geographic Society’s explorer, science, and education programs. “The most influential species of all evolution”, <http://voices.nationalgeographic.com/2009/11/04/evolution_most_influential_species/> , November 4, 2009, Accessed 1/12/16, N.G.) Modified for spelling in brackets

After considering the most important species that evolved before the ascent of human civilization, from the beginning of life on Earth until about 12,000 years ago, and then mulling all the species that have been successful since 12,000 years ago–that is the species that have flourished because of modern humans–Lloyd finds that he agrees with Charles Darwin: **The earthworm is indeed the most influential species in the history of the planet.** Descendants of sea worms that existed five hundred million years ago, earthworms came ashore with the first invertebrate invasions of the land, making their living in damp soils broken up by bacteria, fungi and the roots of colonizing plants, Lloyd writes. “These earthworms have been ploughing up the earth, ventilating the soil and nourishing terrestrial ecosystems with their excrement ever since.” The survivors of five mass extinctions, earthworms have had profound impacts on human history, Lloyd says. “Were it not for their continuous regeneration of soils around damp river valleys such as the Nile, Indus, and Euphrates, early agricultural societies in Egypt, India, and Mesopotamia could never have succeeded in building humanity’s first large-scale urban communities.” Throughout human history earthworms have unintentionally but undeniably triggered the rise of civilizations, Lloyd adds. “**Wherever ea[r]thworms plough, people thrive. When worms perish, societies collapse**.” The European earthworm (Lumbricus terrestris) is probably the most prolific and invasive species in the world, Lloyd says. “Its success is largely thanks to the spread of Europeans, c. 1600 onwards. “Immigrant farmers inadvertently brought these earthworms, sometimes called ‘night crawlers,’ in everything from the soil in their potted plants and their horses’ hooves, to the treads of their boots and the wheels of their wagons. “Today there is hardly a region of North America where Europe’s earthworms have not made a home for themselves. There they continue to plough, ventilate and fertilize the soil to the general benefit of **life in and on the Earth**.”

## Disease

#### Absolutely no chance of extinction from disease

Adalja 16 [Amesh Adalja, infectious disease physician at the University of Pittsburgh] “Why Hasn't Disease Wiped out the Human Race?” June 17, 2016 (http://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/) - MZhu

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained. I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience. For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived. Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like. So what would it take for a disease to wipe out humanity now? In Michael Crichton’s The Andromeda Strain, the canonical book in the disease-outbreak genre, an alien microbe threatens the human race with extinction, and humanity’s best minds are marshaled to combat the enemy organism. Fortunately, outside of fiction, there’s no reason to expect alien pathogens to wage war on the human race any time soon, and my analysis suggests that any real-life domestic microbe reaching an extinction level of threat probably is just as unlikely. Any apocalyptic pathogen would need to possess a very special combination of two attributes. First, it would have to be so unfamiliar that no existing therapy or vaccine could be applied to it. Second, it would need to have a high and surreptitious transmissibility before symptoms occur. The first is essential because any microbe from a known class of pathogens would, by definition, have family members that could serve as models for containment and countermeasures. The second would allow the hypothetical disease to spread without being detected by even the most astute clinicians. The three infectious diseases most likely to be considered extinction-level threats in the world today—influenza, HIV, and Ebola—don’t meet these two requirements. Influenza, for instance, despite its well-established ability to kill on a large scale, its contagiousness, and its unrivaled ability to shift and drift away from our vaccines, is still what I would call a “known unknown.” While there are many mysteries about how new flu strains emerge, from at least the time of Hippocrates, humans have been attuned to its risk. And in the modern era, a full-fledged industry of influenza preparedness exists, with effective vaccine strategies and antiviral therapies. HIV, which has killed 39 million people over several decades, is similarly limited due to several factors. Most importantly, HIV’s dependency on blood and body fluid for transmission (similar to Ebola) requires intimate human-to-human contact, which limits contagion. Highly potent antiviral therapy allows most people to live normally with the disease, and a substantial group of the population has genetic mutations that render them impervious to infection in the first place. Lastly, simple prevention strategies such as needle exchange for injection drug users and barrier contraceptives—when available—can curtail transmission risk. Ebola, for many of the same reasons as HIV as well as several others, also falls short of the mark. This is especially due to the fact that it spreads almost exclusively through people with easily recognizable symptoms, plus the taming of its once unfathomable 90 percent mortality rate by simple supportive care. Beyond those three, every other known disease falls short of what seems required to wipe out humans—which is, of course, why we’re still here. And it’s not that diseases are ineffective. On the contrary, diseases’ failure to knock us out is a testament to just how resilient humans are. Part of our evolutionary heritage is our immune system, one of the most complex on the planet, even without the benefit of vaccines or the helping hand of antimicrobial drugs. This system, when viewed at a species level, can adapt to almost any enemy imaginable. Coupled to genetic variations amongst humans—which open up the possibility for a range of advantages, from imperviousness to infection to a tendency for mild symptoms—this adaptability ensures that almost any infectious disease onslaught will leave a large proportion of the population alive to rebuild, in contrast to the fictional Hollywood versions. While the immune system’s role can never be understated, an even more powerful protector is the faculty of consciousness. Humans are not the most prolific, quickly evolving, or strongest organisms on the planet, but as Aristotle identified, humans are the rational animals—and it is this fundamental distinguishing characteristic that allows humans to form abstractions, think in principles, and plan long-range. These capacities, in turn, allow humans to modify, alter, and improve themselves and their environments. Consciousness equips us, at an individual and a species level, to make nature safe for the species through such technological marvels as antibiotics, antivirals, vaccines, and sanitation. When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short. In many ways, human consciousness became infectious diseases’ worthiest adversary.

#### Burnout and geographical isolation check

Consiglio 17 [Dave, Community College Professor of Chemistry and Physics, 12/7/17, “Could a Disease Wipe Out Humans Entirely?”, <https://www.forbes.com/sites/quora/2017/12/07/could-a-disease-wipe-out-humans-entirely/#387c2f308203> Accessed 2/8/28] BBro

What scenarios seem like they should kill everyone but actually won't? Disease. Everyone seems worried about a killer disease, be it HIV or Ebola or Flu or some unknown pathogen. But humans are going to be really hard to wipe out via disease. Why? Well, we have several things going for us: We have a massive population. **We are geographically widespread**. We are capable of eating nearly anything. We are reasonably diverse as a species. **There are geographically** and genetically **isolated** pockets of our **population. Diseases require** a **vector** to spread. Let’s say the perfect disease arose tomorrow: It kills two weeks after you get it, shows no symptoms until the last minute, is really easy to transmit, and we have very little immunity to it. It still doesn’t kill everyone. Native Greenlanders and the people in Antarctica and people on Navy submarines and the few random people who are immune, and park rangers all either never come into contact with an infected person or else are spared by a genetic fluke. We even have the International Space Station as a potential place to hide and wait for the epidemic to die down. In fairness, nearly everyone is dead in short order, but **once** the **disease has run its course, the pathogen** that causes it **is also** likely to be **dead.** The vast majority of pathogens don’t survive for long outside of their hosts. As such, once nearly everyone is dead and the survivors wait a bit, they’re **unlikely to encounter live pathogen**. As an added bonus, the few surviving people include many of the most naturally immune members of the (now mostly dead) population. Now, don’t get me wrong, this scenario would be catastrophic for humanity. 99.9% of us could die in this way. And it’s possible that the remaining humans would be so isolated as to be unable to find one another for the purposes of reproduction. But I doubt it. Humans are nothing if not fecund, and we have those submarines, boats, airplanes, etc. We will eventually come out from hiding, find that special someone, and breed our way out of trouble. It’s why we’re still around as a species - nothing stops us from making more humans.

#### Disease outbreaks solidifies the Biological Weapons Convention.

Kaufman 10 [Stephen Kaufman, IIP Staff Writer December 10, 2010. Biological Weapons Pact Offers Cooperation Against Pandemics, [http://geneva.usmission.gov/2010/12/10/biological-weapons-pact-offers-cooperation-against-pandemics Accessed 2/8/18](http://geneva.usmission.gov/2010/12/10/biological-weapons-pact-offers-cooperation-against-pandemics%20Accessed%202/8/18)] BBro

Kennedy said the **parties to the BWC** want the arms control and nonproliferation **agreement** to be used to bring together the scientific and health communities, law enforcement professionals and governments in assisting states to develop an integrated approach to any kind of prevention and treatment program for pandemic diseases. “It’s linking up international assistance, and it’s providing the expertise that could conduct the investigations to determine the outbreak. So it’s a whole host of tools at our disposal,” Kennedy said. Along with highlighting the overlap between deliberate and nondeliberate pandemics, the meeting in Geneva discussed the World Health Organization’s (WHO) 2005 International Health Regulations, which require countries to cooperate in the prevention and treatment of diseases. The WHO and BWC, both located in Geneva, have different mandates, but their roles complement one another, Kennedy said. The BWC also established a network of national points of contact in the event of a disease outbreak. Kennedy said there is still a need to help countries better react to pandemic situations by helping them develop their capacities, laws and practices. “It’s plugging gaps. It’s linking up and sharing information, and getting those networks in place” at the local, national and international levels, she said. “**This is achieved through** multilateral **diplomacy**, providing technical assistance to countries and conducting workshops with the help of partner states.” She said the December 6-10 meetings “put us on a very good trajectory” for the Seventh BWC Review Conference, scheduled for Geneva, December 5-22, 2011. The BWC also plans to hold a preparatory conference in April 2011, as well as a series of regional workshops, including in Kenya, Nigeria and Jordan, and additional experts meetings and seminars around the world, she said. The Obama administration is pleased by the level of global interest and hopes soon to see “every single state signed up and fully active in the convention.” “That’s certainly our overarching goal, and I think we’re making progress,” Kennedy said. “This is an arms control regime … and the **implementation has** great **benefits** for every country around the world.”

#### An effective Biological Weapons Convention solves bioterror and the terminal consequences of their disease claims.

Pearson 01 [Graham S. Pearson, Visiting Professor of International Security, Department of Peace Studies, University of Bradford, June 2001. The Regime To Prevent Biological Weapons: Opportunities For A Safer, Healthier, More Prosperous World, [http://www.brad.ac.uk/acad/sbtwc/other/BTWCrgime.pdf Accessed 2/8/18](http://www.brad.ac.uk/acad/sbtwc/other/BTWCrgime.pdf%20Accessed%202/8/18)] BBro

When a wider perspective is considered, it is evident that the BTWC Protocol regime to strengthen the **effectiveness** and improve the implementation **of the BTWC needs to be considered** in the context of an international scene in which there is increasing transparency about the nature of activities and facilities within countries which is facilitated by the information increasingly being made available on the internet and the recognition by more and more countries that they share common goals for a safer, more prosperous world -- a world in which there is greater recognition that the dangers from dual-use materials and technology in general and biological agents and toxins in particular know no frontiers and that an outbreak in one country can spread all too quickly to its neighbours and, indeed, around the world through international travel and trade. The compliance elements of the Protocol regime -- declarations, visits, investigations -- are complemented by the provisions to promote scientific and technological exchange for peaceful purposes as these provisions help States Parties to develop their infrastructure -- and thereby reap benefits in international trade and commerce as well as increasing transparency and enhancing confidence in compliance. The BTWC Protocol regime will thus enhance international security and **counter bioterrorism** as well as also contribute directly to achieving a safer, healthier, more prosperous world bringing benefits to all countries, both developed or developing.

#### Extinction – different type of agent than their disease argument assumes.

Ochs 02 [Richard, MA in Natural Resource Management 2002 –from Rutgers University and Naturalist at Grand Teton National Park, “BIOLOGICAL WEAPONS MUST BE ABOLISHED IMMEDIATELY,” Jun 9, [http://www.freefromterror.net/other\_articles/abolish.html Accessed 2/8/18](http://www.freefromterror.net/other_articles/abolish.html%20Accessed%202/8/18)] BBro

Of all the weapons of mass destruction, the genetically engineered **biological weapons**, many without a known cure or vaccine, **are an extreme danger** to the continued survival of life on earth. Any perceived military value or deterrence pales in comparison to the great risk these weapons pose just sitting in vials in laboratories. While a "nuclear winter” resulting from a massive exchange of nuclear weapons, could also kill off most of life on earth and severely compromise the health of future generations, they are easier to control. Biological weapons, on the other hand, can get out of control very easily, as the recent anthrax attacks has demonstrated. There is no way to guarantee the security of these doomsday weapons because very tiny amounts can be stolen or accidentally released and then grow or be grown to horrendous proportions. **The Black Death** of the Middle Ages **would be small** in comparison to the potential damage bioweapons could cause. Abolition of chemical weapons is less of a priority because, while they can also kill millions of people outright, their persistence in the environment would be less than nuclear or biological agents or more localized. Hence, chemical weapons would have a lesser effect on future generations of innocent people and the natural environment. Like the Holocaust, once a localized chemical extermination is over, it is over. With nuclear and biological weapons, the killing will probably never end. Radioactive elements last tens of thousands of years and will keep causing cancers virtually forever. Potentially worse than that, bio-engineered agents by the hundreds with no known cure could wreck even greater calamity on the human race than could persistent radiation. AIDS and ebola viruses are just a small example of recently emerging plagues with no known cure or vaccine. Can we imagine hundreds of such plagues? HUMAN **EXTINCTION IS** NOW **POSSIBLE**.

1. https://www.merriam-webster.com/dictionary/ought [↑](#footnote-ref-1)
2. https://www.google.com/search?q=resolved+definition&rlz=1C1CHBF\_enUS877US877&oq=resolved+definition&aqs=chrome..69i57.2078j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-2)