# 1NC

## Off

T-USfg

#### Interpretation and violation - the affirmative should defend the hypothetical implementation of a topical plan – they don’t:

#### The resolutional actor is the USFG.

U.S. Legal ’16 [U.S. Legal; 2016; Organization offering legal assistance and attorney access; U.S. Legal, “United States Federal Government Law and Legal Definition,” <https://definitions.uslegal.com/u/united-states-federal-government/>]

The United States Federal Government is established by the US Constitution. The Federal Government shares sovereignty over the United Sates with the individual governments of the States of US. The Federal government has three branches: i) the legislature, which is the US Congress, ii) Executive, comprised of the President and Vice president of the US and iii) Judiciary. The US Constitution prescribes a system of separation of powers and ‘checks and balances’ for the smooth functioning of all the three branches of the Federal Government. The US Constitution limits the powers of the Federal Government to the powers assigned to it; all powers not expressly assigned to the Federal Government are reserved to the States or to the people.

#### “By at least” means the core requirement for topical action is the USFG expanding the scope of its core antitrust laws.

Brower ’66 [John M; June 3; Justice on the Supreme Court of Nebraska; Westlaw, “Schmeckpeper v. Panhandle Co-op. Ass'n,” 180 Neb. 352]

1234 A review of the cases discussed and those cited which \*359 are not discussed indicates that the ordinary and usual meaning of the term ‘at least’ is expressive of a minimum and implies the possibility of more. Its definition in Webster's New Third International Dictionary, Unabridged (1961), we have cited. As set out in 7 C.J.S. 1965, quoted in Barron v. Green, supra, however, in certain instances it does have a different meaning taken from the context in which it occurs, and under particular circumstances it is held to be equivalent to ‘at most’ or ‘not to exceed’ as contended by the plaintiff. We, however, think the usual and ordinary meaning should first be applied to the phrase as it is used in section 21—1302, R.R.S.1943. If that is done the intent of the Legislature clearly appears to mean that a minimum surplus equal to 20 percent of the capital was to be accumulated as therein provided and that more might be provided. We do not think the usual and ordinary meaning of ‘at least’ should be set aside by judicial construction when the context of the statute and the circumstances before the court do not require it. ‘A statute is not to be read as if open to construction as a matter of course. Where the words of a statute are plain, direct, and unambiguous, no interpretation is needed to ascertain the meaning. It is not within the province of a court to read a meaning into a statute that is not warranted by the legislative language. Neither is it within the province of a court to read anything plain, direct, and unambiguous out of a statute.’ Bachus v. Swanson, 179 Neb. 1, 136 N.W.2d 189.

#### Those laws are Sherman, FTC, and Clayton.

Pfaffenroth ’21 [Sonia K, Justin P Hedge, and Monique N Boyce; July 1; Partner at Arnold and Porter, Former Deputy Assistant Attorney General for Civil and Criminal Operations for the Antitrust Division of the US Department of Justice; Counsel at Arnold and Porter; Senior Associate at Arnold and Porter; Mondaq, “United States: A Comparison Of Proposed Antitrust Legislation In 2021: Federal And New York State,” https://www.mondaq.com/unitedstates/antitrust-eu-competition-/1086194/a-comparison-of-proposed-antitrust-legislation-in-2021-federal-and-new-york-state#:~:text=At%20the%20federal%20level,%20there,;1%20(2)%20the%20Federal]

At the federal level, there are three core antitrust laws: (1) the Sherman Act, in which Section 1 outlaws "every contract, combination, or conspiracy in [unreasonable] restraint of trade," and Section 2 outlaws any "monopolization, attempted monopolization, or conspiracy or combination to monopolize";1 (2) the Federal Trade Commission Act, which prohibits "unfair methods of competition" and "unfair or deceptive acts or practices";2 and (3) Section 7 of the Clayton Act, which prohibits mergers and acquisitions where the effect "may be substantially to lessen competition, or to tend to create a monopoly."3 Criminal violations of the Sherman Act carry a maximum penalty of a $100 million fine for corporations, and a maximum penalty of 10 years in prison and a $1 million fine for individuals. A prevailing plaintiff in a civil suit can recover treble damages and attorneys' fees. But federal law currently does not provide for civil penalties when the government brings an antitrust case, only injunctive relief.

#### “Expanding” those laws sets a burden of materially altering them.

Hatter ’90 [Terry J Jr; March 20; January District Court Judge at the Central District of California; Westlaw, “In re Eastport Assocs.,” 114 B.R. 686]

Second, Eastport asserts that the presumption against retroactivity does not apply because the amendment was intended only as a clarification of existing law. Where an amendment to a statute is remedial in nature and merely serves to clarify existing law, no question of retroactivity is involved and the law will be applied to pending cases. City of Redlands v. Sorensen, 176 Cal.App.3d 202, 211, 221 Cal.Rptr. 728, 732 (1985). The evidence in this case, however, does not support the conclusion that the amendment to section 66452.6(f) was simply a clarification of preexisting law. The Legislative Counsel's Digest specifically states that “[t]he bill would expand the definition of development moratorium.” Senate Bill 186, Stats.1988, ch. 1330, at 3375 (emphasis added). Since the Legislative Counsel is a state official required by law to analyze pending legislation, it is reasonable to presume that the Legislature amended the statute with the intent and meaning expressed in the Counsel's digest. People v. Martinez, 194 Cal.App.3d 15, 22, 239 Cal.Rptr. 272, 276 (1987). By its ordinary meaning, the term “expand” indicates a change in the law, rather than a restatement of existing law. In light of the Counsel's comment, Eastport's argument is unpersuasive.

#### Vote Neg –

#### 1. Fairness – Debate is a game and their interpretation destroys competitive equity and clash – this argument is procedural which means you filter all 2AC answers through the lens of competition – they create a monopolizing strategy that makes discussion one-sided and subverts inclusion of the neg – that destroys procedural dialogue which is the only internal link to good debates.

#### 2. Decisionmaking - debate over a clear and specific controversial point of government action creates argumentative stasis – that’s a prerequisite to the negative’s ability to engage in the conversation — that’s critical to deliberation

#### 3. Predictable Limits –

#### a. clash – changing the topic post facto manipulates balance of prep, which structurally favors the aff because they speak last and use perms – key to engage a prepared adversary and a target of mutual contestation.

#### b. prep – specific topics are key to reasonable expectations for 2Ns. Open subjects create incentives for avoidance and monopolization of moral high ground—that denies a role for the neg and turns accessibility.

#### 4. Self-questioning. The process of researching, thinking about, and reflecting on a topic prior to debating it develops essential critical thinking and info-processing skills. Without a predictable, limited resolution that everyone is prepared to discuss, teams will resort to cognitive shortcuts and gut reactions that entrench biases.

## Off

Cap good

#### Growth is sustainable, physical limits aren’t absolute, AND resource use is declining now---the alt unleashes global disaster

Bailey 18 [Ronald; February 16; B.A. in Economics from the University of Virginia, member of the Society of Environmental Journalists and the American Society for Bioethics and Humanities, citing a compilation of interdisciplinary research; Reason, “Is Degrowth the Only Way to Save the World?” https://reason.com/2018/02/16/is-degrowth-the-only-way-to-save-the-wor; RP]

Unless us folks in rich countries drastically reduce our material living standards and distribute most of what we have to people living in poor countries, the world will come to an end. Or at least that's the stark conclusion of a study published earlier this month in the journal Nature Sustainability. The researchers who wrote it, led by the Leeds University ecological economist Dan O'Neill, think the way to prevent the apocalypse is "degrowth."

Vice, pestilence, war, and "gigantic inevitable famine" were the planetary boundaries set on human population by the 18th-century economist Robert Thomas Malthus. The new study gussies up old-fashioned Malthusianism by devising a set of seven biophysical indicators of national environmental pressure, which they then link to 11 indicators of social outcomes. The aim of the exercise is to concoct a "safe and just space" for humanity.

Using data from 2011, the researchers calculate that the annual per capita boundaries for the world's 7 billion people consist of the emission of 1.6 tons of carbon dioxide per year and the annual consumption of 0.9 kilograms of phosphorus, 8.9 kilograms of nitrogen, 574 cubic meters of water, 2.6 tons of biomass (crops and wood), plus the ecological services of 1.7 hectares of land and 7.2 tons of material per person.

On the social side, meanwhile, the researchers say that life satisfaction in each country should exceed 6.5 on the 10-point Cantril scale, that healthy life expectancy should average at least 65 years, and that nutrition should be over 2,700 calories per day. At least 95 percent of each country's citizens must have access to good sanitation, earn more than $1.90 per day, and pass through secondary school. Ninety percent of citizens must have friends and family they can depend on. The threshold for democratic quality must exceed 0.8 on an index scale stretching from -1 to +1, while the threshold for equality is set at no higher than 70 on a Gini Index where 0 represents perfect equality and 100 implies perfect inequality. They set the threshold for percent of labor force employed at 94 percent.

So how does the U.S. do with regard to their biophysical boundaries and social outcomes measures? We Americans transgress all seven of the biophysical boundaries. Carbon dioxide emissions stand at 21.2 tons per person; we each use an average of 7 kilograms of phosphorus, 59.1 kilograms of nitrogen, 611 cubic meters of water, and 3.7 tons of biomass; we rely on the ecological services of 6.8 hectares of land and 27.2 tons of material. Although the researchers urge us to move "beyond the pursuit of GDP growth to embrace new measures of progress," it is worth noting that U.S. GDP is $59,609 per capita.

On the other hand, those transgressions have provided a pretty good life for Americans. For example, life satisfaction is 7.1; healthy life expectancy is 69.7 years; and democratic quality stands at 0.8 points. The only two social indicators we just missed on were employment (91 percent) and secondary education (94.7 percent).

On the other hand, our hemisphere is home to one paragon of sustainability—Haiti. Haitians breach none of the researchers' biophysical boundaries. But the Caribbean country performs abysmally on all 11 social indicators. Life satisfaction scores at 4.8; healthy life expectancy is 52.3 years; and Haitians average 2,105 calories per day. The country tallies -0.9 on the democratic quality index. Haiti's GDP is $719 per capita.

Other near-sustainability champions include Malawi, Nepal, Myanmar, and Nicaragua. All of them score dismally on the social indicators, and their GDPs per capita are $322, $799, $1,375, and $2,208, respectively.

The country that currently comes closest to the researchers' ideal of remaining within its biophysical boundaries while sufficient social indicators is…Vietnam. For the record, Vietnam's per capita GDP is $2,306.

"Countries with higher levels of life satisfaction and healthy life expectancy also tend to transgress more biophysical boundaries," the researchers note. A better way to put this relationship is that more wealth and technology tend to make people happier, healthier, and freer.

O'Neill and his unhappy team fail drastically to understand how human ingenuity unleashed in markets is already well on the way toward making their supposed planetary boundaries irrelevant. Take carbon dioxide emissions: Supporters of renewable energy technologies say that their costs are already or will soon be lower than those of fossil fuels. Boosters of advanced nuclear reactors similarly argue that they can supply all of the carbon-free energy the world will need. There's a good chance that fleets of battery-powered self-driving vehicles will largely replace private cars and mass transit later in this century.

Are we about to run out of phosphorous to fertilize our crops? Peak phosphorus is not at hand. The U.S. Geological Survey (USGS) reports that at current rates of mining, the world's known reserves will last 266 years. The estimated total resources of phosphate rock would last over 1,140 years. "There are no imminent shortages of phosphate rock," notes the USGS. With respect to the deleterious effects that using phosphorus to fertilize crops might have outside of farm fields, researchers are working on ways to endow crops with traits that enable them to use less while maintaining yields.

O'Neill and his colleagues are also concerned that farmers are using too much nitrogen fertilizer, which runs off fields into the natural environment and contributes to deoxygenated dead zones in the oceans, among other ill effects. This is a problem, but one that plant breeders are already working to solve. For example, researchers at Arcadia Biosciences have used biotechnology to create nitrogen-efficient varieties of staples like rice and wheat that enable farmers to increase yields while significantly reducing fertilizer use. Meanwhile, other researchers are moving on projects to engineer the nitrogen fixation trait from legumes into cereal crops. In other words, the crops would make their own fertilizer from air.

Water? Most water is devoted to the irrigation of crops; the ongoing development of drought-resistant and saline-tolerant crops will help with that. Hectares per capita? Humanity has probably already reached peak farmland, and nearly 400 million hectares will be restored to nature by 2060—an area almost double the size of the United States east of the Mississippi River. In fact, it is entirely possible that most animal farming will be replaced by resource-sparing lab-grown steaks, chops, and milk. Such developments in food production undermine the researchers' worries about overconsumption of biomass.

And humanity's material footprint is likely to get smaller too as trends toward further dematerialization take hold. The price system is a superb mechanism for encouraging innovators to find ways to wring ever more value out less and less stuff. Rockefeller University researcher Jesse Ausubel has shown that this process of absolute dematerialization has already taken off for many commodities.

After cranking their way through their models of doom, O'Neill and his colleagues lugubriously conclude: "If all people are to lead a good life within planetary boundaries, then the level of resource use associated with meeting basic needs must be dramatically reduced." They are right, but they are entirely backward with regard to how to achieve those goals. Economic growth provides the wealth and technologies needed to lift people from poverty while simultaneously lightening humanity's footprint on the natural world. Rather than degrowth, the planet—and especially its poor people—need more and faster economic growth.

#### Growth solves space colonization otherwise risks extinction.

Kovic '19 [Marko; March 2019; co-founder president of the Zurich Institute of Public Affairs Research; "The future of energy," https://osf.io/preprints/socarxiv/aswz9/download]

Ideally, the mitigation of climate risks will coincide with and contribute to the development of improved or even entirely novel sources of energy that will increase the long-term chances of humankind’s survival by means of space colonization. This is not an unrealistic expectation, given that the mitigation of climate risks consists, to a large degree, of replacing fossil fuels with other, less harmful sources of energy. However, some climate change mitigation strategies might actually harm the long-term prospects of humankind.

First, it is possible that dominant climate change mitigation strategies will actively exclude any form of nuclear energy from the repertoire of climate-friendly energy sources. Existing and experimental (molten salt) fission reactors could play a significant role in replacing carbon-heavy energy sources, but pro-environmental attitudes often overlap with anti-nuclear sentiments [65]. As a result, and in combination with other problems such as large-scale market failures of existing fission reactors (one of the reasons being that generating electricity from fossil fuels is cheaper) [66], nuclear fission does not currently have significant standing as a “cleantech” contribution to climate change mitigation. From a long-term perspective, an unfavorable view of nuclear energy in the context of climate change might mean that technological progress in the areas of nuclear fission and fusion might come to a halt (for example, due to explicit bans or implicit disincentives). If such a scenario came to be, our attempts at colonizing space would almost certainly fail: There are currently no alternatives to fission and fusion, and it is highly improbable that Solar power alone could suffice for sustaining extraterrestrial habitats.

Second, there is some probability that climate change mitigation strategies will change the social order towards a degrowth philosophy. Degrowth is a vague socio-economic concept and social movement that, in general, calls for a contraction of the global and national economies by means of lower production and consumption rates, and, to some degree, to more profound changes to the “capitalist” system of economic production [67]. Degrowth or degrowth-like approaches are being actively considered as climate risk mitigation strategies [68, 69], and degrowth would almost certainly be a highly effective measure for mitigating climate change. After all, if we were to drastically reduce or even completely eliminate the (industrial) sources of greenhouse gases, the amount of greenhouse gases that are being emitted would accordingly drastically sink. From the long-term perspective of humankind’s survival, degrowth is problematic in at least two ways. First, there is a risk that the general contraction of economic activity would also slow or eliminate progress in the domain of energy, which would, in turn, reduce the probability of successful space colonization due to an absence of suitable energy sources. Second, and more fundamental: If degrowth were to become a dominant societal paradigm, it is uncertain whether the long-term survival of humankind by means of space colonization would be regarded a desirable goal. In a literal sense, establishing extraterrestrial colonies would mean growth; the size of the total human population would grow, and the area of space-time that humans occupy would grow.

In a more philosophical sense, degrowth might even be antithetical to space colonization. Even though both degrowth and space colonization have a similar moral goal – increasing wellbeing – , the ends to that goal are very different. Within degrowth philosophy, the goal is, metaphorically speaking, not to “live beyond our means”: We should strive for “ecological balance”, and such a state should increase the average wellbeing. But the frame of reference is the status quo; Earth and humankind as we know it today. Space colonization, on the other hand, operates with a much larger frame of reference: All the future generations of humans (and other sentient beings) who could enjoy wellbeing if we succeed in colonizing space – and who will categorically be denied that wellbeing if we fail to colonize space [70]. The goal of space colonization as a moral project is not to live beyond our means, but to actively redefine and expand what our means are through scientific and technological progress.

#### Cap net reduces war

Mousseau, 19—Professor in the School of Politics, Security, and International Affairs at the University of Central Florida (Michael, “The End of War: How a Robust Marketplace and Liberal Hegemony Are Leading to Perpetual World Peace,” International Security, Volume 44, Issue 1, Summer 2019, p.160-196, dml)

Is war becoming obsolete? There is wide agreement among scholars that war has been in sharp decline since the defeat of the Axis powers in 1945, even as there is little agreement as to its cause.1 Realists reject the idea that this trend will continue, citing states' concerns with the “security dilemma”: that is, in anarchy states must assume that any state that can attack will; therefore, power equals threat, and changes in relative power result in conflict and war.2 Discussing the rise of China, Graham Allison calls this condition “Thucydides's Trap,” a reference to the ancient Greek's claim that Sparta's fear of Athens' growing power led to the Peloponnesian War.3

This article argues that there is no Thucydides Trap in international politics. Rather, the world is moving rapidly toward permanent peace, possibly in our lifetime. Drawing on economic norms theory,4 I show that what sometimes appears to be a Thucydides Trap may instead be a function of factors strictly internal to states and that these factors vary among them. In brief, leaders of states with advanced market-oriented economies have foremost interests in the principle of self-determination for all states, large and small, as the foundation for a robust global marketplace. War among these states, even making preparations for war, is not possible, because they are in a natural alliance to preserve and protect the global order. In contrast, leaders of states with weak internal markets have little interest in the global marketplace; they pursue wealth not through commerce, but through wars of expansion and demands for tribute. For these states, power equals threat, and therefore they tend to balance against the power of all states. Fearing stronger states, however, minor powers with weak internal markets tend to constrain their expansionist inclinations and, for security reasons, bandwagon with the relatively benign market-oriented powers.

I argue that this liberal global hierarchy is unwittingly but systematically buttressing states' embrace of market norms and values that, if left uninterrupted, is likely to culminate in permanent world peace, perhaps even something close to harmony. My argument challenges the realist assertion that great powers are engaged in a timeless competition over global leadership, because hegemony cannot exist among great powers with weak markets; these inherently expansionist states live in constant fear and therefore normally balance against the strongest state and its allies.5 Hegemony can exist only among market-oriented powers, because only they care about global order. Yet, there can be no competition for leadership among market powers, because they always agree with the goal of their strongest member (currently the United States) to preserve and protect the global order based on the principle of self-determination. If another commercial power, such as a rising China, were to overtake the United States, the world would take little notice, because the new leading power would largely agree with the global rules promoted and enforced by its predecessor. Vladimir Putin's Russia, on the other hand, seeks to create chaos around the world. Most other powers, having market-oriented economies, continue to abide by the hegemony of the United States despite its relative economic decline since the end of World War II.6

To support my theory that domestic factors determine states' alignment decisions, I analyze the voting preferences of members of the United Nations General Assembly from 1946 to 2010. I find that states with weak internal markets tend to disagree with the foreign policy preferences of the largest market power (i.e., the United States), but more so if they are major powers or have stronger rather than weaker military and economic capabilities. The power of states with robust internal markets, in contrast, appears to have no effect on their foreign policy preferences, as market-oriented states align with the market leader regardless of their power status or capabilities. I corroborate that this pattern may be a consequence of states' interest in the global market order by finding that states with higher levels of exports per capita are more likely than other states to have preferences aligned with those of the United States; those with lower levels of exports are more likely to have interests that do not align with the United States, but again more so if they are stronger rather than weaker.

Liberal scholars of international politics have long offered explanations for why the incidence of war may decline, generally beginning with the assumption that although the security dilemma exists, it can be overcome with the help of factors external to states.7 Neoliberal institutionalists treat states as like units and international organization as an external condition.8 Trade interdependence is dyadic and thus an external condition.9 Democracy is an internal factor, but theories of democratic peace have an external dimension: peace is the result of the expectations of states' behavior informed by the images that leaders create of each other's regime types.10 In contrast, I show that the security dilemma may not exist at all and how peace can emerge in anarchy with states pursuing their interests determined entirely by internal factors.11

## Case

#### Vote neg on presumption –

#### a. Ballot’s not key – Their calls to break down utopian thinking doesnt rely on the ballot to solve---they said the ballot isnt key. The reading of the 1AC should be enough to inject their epistemology into the debate space, which is their only internal link to solvency. Winning doesn’t validate their truth claims and isn’t key to their strategy because judges decide on arguments they don’t agree with all the time.

#### b. They can’t solve – their evidence indicates we need to break down monopolies which is a necessary material shift that the ballot cannot resolve

#### Affective pessimism gets coopted by fascism. Info’s not dissuasive—shared meaning-making is inevitable and can generate positive value and political change.

Bailey, 20—Assistant Professor in Politics in the School of International Studies at the University of Nottingham (Mark, “Cassirer, Fatalism and Political Myth: Historical Lessons in the Consequences of Pessimism for International Relations,” *Pessimism in International Relations*, Chapter 4, pg 57-64, SpringerLink, dml)

Specifically, Heidegger’s work was instrumental in sowing a public mood of deep pessimism about the future in its assertions that humanity is defined by Geworfenheit, the condition of being involuntarily ‘thrown’ into the stream of time, leaving it permanently a prisoner of the conditions and temporality of its existence.12 Coupled with the successive political and economic crises of the interwar period—which provided considerable apparent veracity to the principal theses of both Spengler and Heidegger)—this climate of fatalism and pessimism was fundamentally explosive, potentially creating ‘a pliable instrument in the hands of the political leaders’.13 In making these points, Cassirer recognised that a culture of fatalism also represented the death of politics. As Colin Hay explains, ‘fatalism and resignation are the antithesis of politics. The extent to which our destiny is determined by processes beyond our control is the extent to which it is non-political… Similarly, the extent to which we entrust our destiny to fate is the extent to which we deny ourselves the capacity to shape outcomes’,14 Unable to perceive an escape from their present torment, millions of Germans in the 1930s were prepared to surrender their political and ethical freedoms to those who proclaimed that they could.

It was an attempt to find answers to the questions raised by the rise of uniquely modern forms of political mythology that spurred Cassirer to write The Myth of the State. In answer to the crises of the time, the Nazis proved particularly adept at offering a carefully fabricated, superficially plausible and emotionally compelling account of the reasons behind the contemporary political and economic situation that made the complex and multifaceted beguilingly simple. Moreover, by capitalising on a deep sense of historical fatalism and pessimism, the Nazi account of the reasons for Germany’s woes effectively delivered them carte blanche to remake German society and culture in their own genocidal image.

Cassirer’s Historical Context

Cassirer was writing in response to a twin crisis in Continental philosophy and the increasing degeneration of the political situation in interwar Germany. In many respects, he was embarking on a doomed mission to save the existing liberal order, consummated in Germany in the formation of the Weimar Republic. He also sought to preserve the liberal, Kulturphilosophie tradition of figures such as Goethe, Herder and Humboldt from being consumed by reactionary and anti-rationalist political and cultural forces in interwar Germany that despised the fundamental optimism that underpinned this movement’s view of culture as the source of human self-liberation. The first of these twin philosophical crises was the impact of Darwinism on philosophy, which Cassirer argued had led to ‘a complete anarchy in thought’.15 The publication of the Origin of the Species (1859) resulted in a major shift in the character of anthropological philosophy from mathematical explanations of human nature to biological ones. It similarly encouraged a widespread belief that the empirical facts of evolution would similarly lead to a metaphysical revelation of the fundamental principles underpinning evolution’s dynamic processes of change. This would contribute to the uncritical projection of the telos of natural evolution onto the world of culture, and the concomitant belief that a cultural telos could be discerned by reference to the empirical facts of human cultural life. The result was a race to reduce the evolution of human culture to a primum mobile, so as to systematise human culture along ‘scientific’ lines in a quest to prove conclusively the essential unity and homogeneity of human nature. However, this race produced multiple theories of human nature that were at once reductive and utterly mutually exclusive in their different accounts of human nature’s essential motivating force. Moreover, they each exhibited a tendency to be inflated (deliberately or otherwise) into Grand Theories of everything. These exhibited tendencies that philosopher Mary Midgley later saw as reflecting a symbiotic relationship between ‘reductionism’ and ‘payoff’: the reduction of social phenomena to a singular cause that then becomes a universal solution to all problems.16

The appearance of this multitude of conflicting explanations concerning the underlying metaphysical principles of human nature resulted in a complete loss of an ‘intellectual centre’; an absence of any general frame of reference against which philosophical claims might be judged for their veracity. It also contributed to a growing personalisation of intellectual disciplines and the increasing ‘barbarism of specialization’ in philosophy and the social sciences as more and more disciplines emerged, focusing on ever-more limited aspects of human activity. This narrowing of focus, together with the tendency towards the formation of ‘schools’ of thought within, between and in some cases across disciplines, centred on individual scholars whose words quickly assumed quasi-theological and eschatological qualities in the hands of their numerous disciples. For Cassirer, this situation was increasingly intolerable, leading to a crisis in humanity’s knowledge of itself that presented a ‘grave threat to…ethical and cultural life’.17

The second philosophical crisis that Cassirer confronted was the growing emergence of Liebensphilosophie, the ‘Philosophy of Life’, in the early years of the twentieth century. This was a form of that fundamentally clashed with the kind of idealist philosophy of Spirit (Geist) that Cassirer’s work typifed. Closely associated with the philosophies of Kierkegaard, Bergson, Simmel, Nietzsche, Heidegger and Scheler, Liebensphilosophie completely rejected the historicist optimism omnipresent in Cassirer’s work, which placed a deep-seated faith in the progress of the human spirit in history. In contrast, Liebenphilosophie asserted an equally deep-seated, reactionary and highly anti-rationalist pessimism, in which Geist ‘is seen not as a transformation of life but as alienation, an inauthentic relationship to Being’.18 Thus, Liebensphilosophie sought a more ‘authentic’ and immediate mode of existence through the rejection of modern rationalism and the perceived arid technicism of modern, liberal, capitalist civilisation. In particular, it encapsulated a deep disenchantment and regarded Cassirer’s Enlightenment-based Kantian liberalism as being fundamentally deluded in the face of the experiences of the war and the economic and political crises that followed.19 Cassirer himself was not entirely unsympathetic to many of the arguments of the life-philosophers. He was alive to the threat to modern society presented by technological alienation and the manner in which consumer capitalism portended society’s moral debasement, thanks to its reduction of life to a fruitless quest to satisfy material desires.20 Moreover, in the case of the life-philosophers’ understanding of the purely expressive nature of myth, he was in complete agreement, even as he contested their assertion that myth presented a more ‘authentic’ mode of existence than that of reason.

In response to these twin crises, Cassirer offered the three volumes of The Philosophy of Symbolic Forms, and a series of later works, such as The Myth of the State and The Logic of the Cultural Sciences. The Philosophy of Symbolic Forms, in particular, can be seen as Cassirer’s attempt to provide, first, an answer to the crisis of self-knowledge that he held responsible for many of the failings of modernity and, second, to provide the general philosophical framework against which truth claims could be tested. Through all of these works, Cassirer continues to assert his fundamentally optimistic, liberal idealism. Here we learn that humanity is fundamentally a symbolic animal; it is the power to engage in the process of meaning-creation through symbolisation that separates humanity from other animals. No other creature has the power to create abstract meanings and concepts in the manner that, for instance, distinguishes humanity’s experience of time as a concrete past, present and future from the animal world’s experience of pure immediacy.21

These works reflected Cassirer’s need to balance the relationship between the various symbolic forms, from the pure irrational expressiveness of myth to the rationalist signification of natural science.22 They allowed Cassirer to identify the significant fallacies of both Liebensphilosophie and of the logical positivists, who had narrowed the focus of philosophy to purely logical questions.23 For one thing, as a fundamentally symbolic animal, all human meaning-creation, even at its most primeval and expressive in the form of myth, requires mediation through the process of symbolic creation. We simply cannot recognise anything as being meaningful without the process of conceptual formation that symbolisation involves. Therefore, for humanity, a world of pure immediacy cannot exist.24 Further, those such as Simmel who despaired of the process of self-alienation of creator from object of cultural creation discounted the truly democratising effects of culture. It presented a realm in which all could play their part, no matter how small it might prove to be. Rather than see culture as a source of alienation and pessimism, therefore, humanity needs to recognise that we are all participants in the dance of cultural creation; it is fundamental to our very existence as human beings and is therefore inescapable.25

However, perhaps the most potent critique of life-philosophy was one that Cassirer advanced only tenuously in the famous 1929 Davos debate with the figure often presented as his philosophical nemesis, Martin Heidegger. This critique can be effectively summarised in a single question: ‘if not this, then what?’ Cassirer challenged Heidegger’s radical rejection of any form of universality, rooted in the latter’s ontological insistence of the lonely finitude of Dasein—human existence—and of the nature of universality as the very expression of inauthentic existence. Similarly, for Heidegger, the temporal finitude of Dasein limited all products of culture to the same impermanence as human beings themselves. Pointing to the fact of linguistic communication, and by extension to a situation in which he and Heidegger could conduct such a conversation, Cassirer challenged this assertion. That linguistic communication was possible at all pointed to the necessary existence of some forms of intersubjective universality that made human social life possible, and which were therefore key to determining the very nature of our existence.26 This critique is potentially highly illuminating. It indicates one of the core reasons why Cassirer accused Heidegger and Spengler, and life-philosophy in general, of contributing, however unintentionally, to the climate of fatalism and pessimism in German society that afforded National Socialism the opportunity to occupy political and cultural space. In his extreme ontological solipsism, Heidegger undermined the possibility of a common morality, of a shared, intersubjective criteria for assessing that which is true and that otherwise. If this was Heidegger’s intention, therefore, with what did he intend to replace these things, other than a Darwinistic ‘war of all against all’?27 What then were the prospects for human civilisation other than a slide into the abyss?

In their cultivation of a culture of pessimism in German life, their rejection of reason as ‘inauthentic’, their purifying elision of truth in favour of the expressive irrationalities of myth, and their consequent failure to stand up to (and even, in Heidegger’s case, the acceptance of) the violent mythical fantasies of Nazism, many of the life-philosophers, and indeed the German academy in general, stood accused of a fundamental dereliction of their philosophical duty in warning of the dangers Nazism presented to cultural life.28 Moreover, in their active embrace of disenchantment with Enlightenment ideals and its consequent pessimism concerning the future, the life-philosophers and their followers forgot another of the aphorisms of the Nietzsche they so venerated: that when you stare into the abyss, the abyss stares back at you.

Political Myth, Philosophy and Pessimism in the Present

As when Cassirer was composing his later works, our contemporary period sees a liberal world order threatening to collapse under the weight of its own contradictions. A combination of near-continuous economic and financial crisis, technological alienation, ecological destruction, cultural and demographic shifts, disillusionment with and distrust of the institutions of liberal democracy especially, and soaring rates of wealth and income inequality have contributed to the irruption of highly anti-rationalist, reactionary populist movements across the world. Accompanying the rise of these movements has been the emergence of a form of ‘post-truth’ political discourse that shows complete indifference to questions of truth or falsity and exhibits many of the characteristics of the technique of the modern political myth Cassirer articulated in 1945. None of these movements exhibit anything like the ambitions for global conquest and genocide of the Nazis, but nevertheless they reflect a profound, increasingly global, culture of pessimism and political disenchantment that portends great uncertainty with respect to the future. Of particular concern to this chapter is one of the fundamental questions that Cassirer posed in The Myth of the State with respect to Heidegger and Spengler especially: what has been the role of scholarship in precipitating this state of affairs? This is a question that brings the problem of ‘if not this, then what?’ to the very centre of critical analysis.

This question is of specific interest when considering the increasing ubiquity of post-structuralist forms of critical inquiry in the social science s. Is perhaps the cultural legacy of post-structuralism the exact opposite of what post-structuralists themselves actually intended? In short, to what extent has the post-structuralist determination to problematise all forms of ontological certainty, of fixed identity and secure foundations to knowledge, together with its often aggressively anti-rationalist rejection of both liberalism and the Enlightenment (for all the considerable flaws of both), actually become part of the problem, as opposed to part of the solution?29

For example, the post-structuralist claim that there are no authoritative ontological claims as to what is ‘real’, only a multiplicity of interpenetrating and competing interpretations of the nature of existence, historical events and the social world is seriously problematic. Rather than being a source of political emancipation, the bleak post-structuralist assessment of modern political communities contributes to a profound sense of ontological disorientation, not least in its linkage of the absence of truth to the operations of political violence in the form of power and the sovereign state.30 Moreover, it leads to the question as to whether such positions fuel the quest for ontological certainty that often fuel the discourses of reactionary populist political myths, not least in the form of some notion of the ‘true’ or ‘authentic’ community of ‘the nation’. Questions remain, therefore, as to whether post-structuralism, for all the undoubtedly valuable work it has done in identifying cultural, political, ethnic, racial, socioeconomic and other forms of (often hidden) exclusions and acts of oppression and violence, might not have ended up doing more harm than good in terms of presenting new forms of political possibility (which in the case of Foucault are deemed impossible, anyway).31

Rather than the radical, liberatory and emancipatory rethinking of contemporary life and history its adherents have often claimed, this line of argument posits that post-structuralism has instead been profoundly debilitating to the remaking of political life in a manner that might address the many issues of the relationship between power and knowledge (especially in contemporary capitalism). Instead of leading to a revolution in thinking and a rejuvenation of political communities, therefore, post-structuralism has served to inculcate a deep current of solipsism, pessimism, confusion and nihilistic cynicism in both popular and intellectual life that has served to open a considerable political space in which the political myths of post-truth have been able to thrive in the absence of any firm counterweight.32

These problems serve to bring us back to one of the fundamental questions in Cassirer’s philosophy that post-structuralism lacks an answer to: how can a ‘crisis in self-knowledge’ and ‘what counts as truth’ be addressed in an intellectual climate in which the possibility of either has been obliterated? In denying any ethical foundation to knowledge, post-structuralism denies any ethical foundation to politics and, in the process, negates the possibility of holding to account even the most ludicrously fantastical, outright fictional and frighteningly totalising accounts of political and historical events. This has proven profoundly destructive to the ability to maintain the kind of pluralistic and respectful dialogue necessary to the maintenance of functional, accountable, transparent and deliberative democratic politics advocated by Cassirer. Such a politics remains the starting point for any kind of emancipatory process focused on the delivery of social justice, not least to those amongst the silenced, oppressed and marginalised. However, it is difficult to see how such a politics is possible if it is not conceivable to at least agree dialogically on a set of processes through which claims to truth and knowledge can be verified, validated and accepted. This ontological dislocation begs the question as to how, and on what grounds, individuals may make rational and morally autonomous judgements in a polity in which the emotionally centred narratives of political myths have become dominant. Faced with this problem, the question of ‘if not this, then what?’ assumes a degree of importance that has arguably never been more acute since the time of Cassirer himself.

#### Expertism is good—humanities majors shouldn’t be in charge of nuclear silos.

Milne and Kinsella, 17—Faculty of English, University of Cambridge AND School of Media, Culture and Creative Arts, Faculty of Humanities, Curtin University (Drew and John, “NUCLEAR THEORY DEGREE ZERO, WITH TWO CHEERS FOR DERRIDA,” Angelaki, 22:3, 1-16, dml)

A further line of political deflection is the accelerationist strategy. There are quasi-leftist accelerationists (Mackay and Avanessian). We should take seriously the proposition that the only way to save the planet is to accelerate the pace of technological innovation. On one view, the only way to save the planet from global warming is by developing nuclear fusion technology. This points down the pathway of the Hadron collider and big science. But there is another acceleration that would decommission all forms of nuclear technology, and rather than imitating the sun, seek renewable forms of symbiosis with solar energy. A global diversion of military and industrial resources into renewable and sustainable energy forms would constitute a technological acceleration coupled with a radical deceleration in fossil fuel consumption, perhaps even putting the brakes on the fallacy of economic growth. What quickly emerges is that there are choices to be made across contested terrains. The forms of acceleration are political choices, choices of great urgency, but to thematise “acceleration” as such provides scant critical purchase on different forms of acceleration. What is needed are nuanced mediations of the science and technology currently available, along with global democratic decision making on those technologies we choose to accelerate or slow down.

Another version of the “accelerationist” argument captures some of the ideological workings of the term. In Marxist circles, an “accelerationist” is someone who thinks that the collapse of capitalism will be hastened by allowing reactionary forces to speed up capitalism’s self-destruction. There are occasions when such an argument has validity: nothing about the form of the argument makes it inherently or structurally wrong. There are revolutionary moments when allowing capitalism to collapse in order to rebuild a socialist society is a better path than propping up a failing capitalist regime. The judgement is political rather than philosophical. In most contexts, however, the accelerationist argument, especially as a political principle, is deeply dangerous. It would be better, for example, to preserve a failing US capitalist regime while building social forces to take it over, than to allow the nuclear weapons of the United States to fall into the hands of a suicidal military rearguard or some counter-revolutionary terrorist organisation. Preserving the possibility of human life might involve propping up collapsing capitalist institutions, not least the nuclear safety inspectorate, rather than allowing humanity to be swallowed up by some death spiral of presidential dictators in fear of being toppled. These are critical judgements that could arise at any moment, with real risks that poor judgements will hasten a nuclear confrontation that leads to mutually assured annihilation. The formal shape of an accelerationist argument needs to be understood strategically and politically if it is to address nuclear questions.

The accelerationist view that the deepening of capitalism could hasten its self-destructive tendencies and lead to its collapse is not inherently suicidal, but consideration of what the collapse of capitalism might mean for the global stock of nuclear weapons and nuclear power stations indicates dangers. Amid the collapse of capitalism, securing the safety of nuclear resources is a fundamental priority, and preparing a decelerationist strategy is an essential political position for any radical formation serious about nuclear safety. Against the horizon of nuclear crisis, we rely on workers to know how to manage and decommission nuclear weapons, silos and power stations. This requires “good” science and ongoing struggles to control the decision making around weapons and energy systems. Concrete consideration of what happens to ageing nuclear systems in an imploding political system has been tested in the fall of the Soviet Union. Imagine the retrenchment of reactionary forces around nuclear installations threatening suicidal political terrorism on a global scale. The risks of a collapsing capitalist system taking the world down with it are clear. Chernobyl and Fukushima, moreover, stand as metonyms of the risks involved in systems that were apparently functional and yet spiralled out of control even in what might be called peacetime. The risks of the US or the Chinese nuclear androids imploding involve different decisions. Again, the need is for nuanced political judgements and strategies, involving scientific expertise along with solidarity between scientists, workers and new social formations.

The need for nuanced political engagement with “good” science suggests some of the risks in any thematisation of science within archaic philosophical paradigms. One form of nuclear denial is the reluctance to engage with the concrete consequences of scientific knowledge, preferring to retreat behind the limited competence of the humanities scholar. It takes some hubris of philosophical interpretation to suggest that literary studies can offer to understand the fictional heart of the nuclear threat despite knowing very little about the science and technology involved. There will, doubtless, be philosophical, ontological and metaphysical questions that science and technology cannot answer. Nuclear arguments may carry within their forms and conditions of possibility the illusions of Western metaphysics, and decommissioning nuclear metaphors could turn out to be as significant as criticising the public lies of nuclear policy: but the nuclear android also imposes less philosophical imperatives to engage with science, from medical science to nuclear waste disposal, and through the critique of the political economy of the nuclear android. None of this suggests that metaphysics should or could be deleted. To deflect engagement with the existing mess of the nuclear android back into metaphysical and literary questions nevertheless threatens to evade the existing threats, not just of nuclear annihilation but of Indigenous rights, environmental politics, and the raft of mediations and regulative practices on which any amelioration of nuclear damage depends. Nuclear war remains an imminent threat, but so does the persistence of practices and strategies that contribute to maintenance of the spectacle of the nuclear rather than its disarmament and decommissioning. To reduce the problem to the “threat” of nuclear war is to imagine that the actually existing industrial behemoth of nuclear production is a fiction. It isn’t. Nuclear weapons testing and the history of nuclear accidents were not just fables, and nor was the arms race a war of sophistry and rhetoric, however much sophistry and rhetoric were deployed to disguise the ecocidal tendencies of the nuclear android.

#### It’s key to any action or conception of politics beyond the ivory tower—even if they win total rationality is bad, there’s no way to convince anyone of that without using the same logic they critique. Rigorous testing of truth claims through debate is effective and a better guide for action than throwing truth to the wind.

Horsthemke, 17—Bildungsphilosophie und Systematische Pägagogik, Katholische Universität Eichstätt-Ingolstadt (Kai, “‘#FactsMustFall’? – education in a post-truth, post-truthful world,” Ethics and Education, June 28 2017, dml)

Higgins suggests that human beings should be understood to ‘make meaning and apprehend truth from radically different standpoints and worldviews, and that our great wealth and freedom will likely lead to more, not fewer, disagreements about the world’. ‘In the post-truth era’, she says,

we should be able to articulate not one but many different perspectives. …

Our post-truth era, in short, need not be an obstacle to taking common action. We might see today’s divided expert class, and fractious publics, not as temporary problems to be solved by more reason, science, and truth, but rather as a permanent feature of our developed democracy. We might even see this proliferation of belief systems and worldviews as an opportunity for human development. We can agree to disagree and still engage in pragmatic action in the world. (Higgins 2013)

How would one account for human development in the absence of a common commitment to rationality and truth, and what would constitute a standard for successful ‘pragmatic action’? In the absence of truth, which helps distinguishing knowledge from mere belief, how would one even make sense of ‘understanding’? If it is to have any meaning at all, understanding requires reference to an objective framework, to facts (whether natural or social), truth, the way things are, etc. Understanding, admittedly, is context-dependent, because it has a characteristically subjective component. Nonetheless, it obtains its meaning, its cognitive force, from its additional, essential connection with truth: it is directed towards truth, towards the way the world is. Higgins is right about one thing: beliefs and belief systems vary, but she errs in taking this to imply that ‘there is only … a perspective “knowing”’, or ‘deep pluralism’ with regard to truth – that apprehension from ‘radically different standpoints and worldviews’ is all that can be said about truth. (A favourite postmodernist sleight-of-hand is to refer to ‘truthS’.) Similarly, Arendt (1967, 5) correctly emphasizes diversity of human opinions. Yet, this acknowledgement does not, indeed cannot, require us to fetishize cognitive pluralism and epistemological diversity (see Levisohn and Phillips 2012; Siegel 2012). People’s opinions and judgements differ, yet – as Ronald Beiner has put it – ‘they are drawn together in political argument and rational debate because of what they share: a common aspiration to apprehend moral and political truth’ (Beiner 2008, 32). In The Human Condition, Arendt uses the image of a table to illustrate her conception of a public world: ‘To live together in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; the world, like every inbetween, relates and separates men at the same time’ (Arendt 1998, 52). Beiner sees this ‘image of the world that simultaneously separates us and draws us together’ as workingequally well to capture our relationship to truth. Our opinions divide us, but we wouldn’t be motivated to formulate our opinions, articulate them, and thus share them with others unless we were participants at a deeper level in a shared quest for moral and political truth that draws us back together as a community of truth-seekers. Exercising political judgment means that holding differing opinions never separates us sufficiently to cancel out this community of shared aspiration. (Beiner 2008, 132)

Educational implications

What are the implications for education? Studies indicate that children, teenagers, students and also adults are increasingly unable to distinguish between news and fake news, between a scientific study and a sponsored advertisement. (The latter is usually marked by the indicator ‘sponsored content’.)14 What makes this even more remarkable is that the internet also greatly facilitates the cross-checking of received information. People have always been gullible and easily persuaded by data and statistics, however fabricated. Thus, the ‘digital intelligence’ so frequently attributed to children and teenagers is a bit of a myth, or at least only partially applicable – which points to the urgent need for courses promoting internet intelligence and digital literacy that many schools have already begun to offer.15

In this regard, too, the New York Times16 recently launched its first major brand campaign in decades, a not-entirely-non-commercial campaign that

is based on a fact – that the truth matters, now more than ever. The truth, as our journalists can attest, is also incredibly hard to get to. We remain undeterred in our efforts to reveal and report the facts with integrity and courage.

The newspaper invites the committed public to share ‘the work and [to participate] in our student subscription sponsorship program, which brings The New York Times to public classrooms across America’.

What about the curriculum? Not included, at least not under the guise of ‘knowledge’, should be mere beliefs or opinions unanchored by reason/s, bald assertions, superstitions, prejudice, bias – in fact anything that involves myth, fabrication and constitutes an infringement on the cognitive rights of learners. However, it may be pedagogically and epistemically useful to teach these qua beliefs, opinions, assertions, superstitions, prejudice and bias. This would no doubt strengthen students’ reasoning and critical thinking abilities, something I take – without adducing reasons – to be desirable. While something might be said for teaching strategies that are not directly truth-promoting, like playing devil’s advocate or trying on an argument for size, good practice is arguably modelled by educators who pursue truth and who are truthful and sincere in their interactions with others.

Yet, it is no longer sufficient to present knowledge, to make facts available. There is also a need for second-order elucidation that – over and above transmission and mediation of contents – also provides information about their origin, how they came to be, and that advertises the rationality at work in content selection. Classical gate-keeping must be accompanied by what might be called ‘gate-informing’ – which goes beyond selection of relevant information and knowledge to include making one’s selection criteria transparent, providing information about one’s sources, a self-reflective, dialogically oriented defence of relevance and plausibility, and claims to objectivity. Simply put, academics and teachers have to be prepared to explain again and again how they work and why they say what they say. Gate-informing also has to be used, without false modesty or politically correct restraint, to counteract disinformation, moral manipulation, and the like.

#### The impact is the total breakdown of society.

Horsthemke, 17—Bildungsphilosophie und Systematische Pägagogik, Katholische Universität Eichstätt-Ingolstadt (Kai, “‘#FactsMustFall’? – education in a post-truth, post-truthful world,” Ethics and Education, June 28 2017, dml)

Contra John Keats, truth is not necessarily beautiful: in fact, it is often brutal, ugly and disgusting. We also do not always love truth: on balance, perhaps our lives would seem to be more pleasant and perhaps even more bearable without it. What, then, is it about truth that makes it so important and that renders its absence a calamity? According to Keyes (2004),

Post-truthfulness … erodes the foundation of trust that underlies any healthy civilization. When enough of us peddle fantasy as fact, society loses its grounding in reality. Society would crumble altogether if we assumed others were as likely to dissemble as tell the truth. We are perilously close to that point.

Without an epistemological premium placed on truth and without an ethical premium placed on truthfulness, society on any large scale could not function and would in all likelihood break down completely. If we could not know as a matter of course whether or not someone was telling the truth, the social fabric would simply be eroded – or society would not be possible in the first place. ‘The truth’ may be the world’s secret – but we can learn to avoid falsehoods and error and, in so doing, get closer to the way things really are … or were, for that matter.

#### Debates oriented around solution-based politics are good---it’s an interpretive bridge that otherwise falls into fatalism.

Simon and Gilliam 13 (Adam F. Simon and Frank D. Gilliam Jr., PhD in Political Psychology and Statistics from UCLA and Former Professor of PoliSci @ Yale and University of Washington and Senior Researcher at the Framework Institute, PhD in PoliSci from University of Iowa and currently Chancellor of UNC Greensboro and Dean of the UCLA Luskin School of Public Affairs sitting as Senior Fellow of the Framework Institute, “Framing and Facts: Necessary Synergies in Communicating about Public Safety and Criminal Justice”, A FRAMEWORKS RESEARCH REPORT: SEPTEMBER 2013, September 2013, pp. 27-30) [sr]

Summary of Key Experimental Survey Finding Figure 5 selects and concentrates the results from the previous Aigures to underline the central result from the experiment — namely, that combining the Pragmatism value and the three Racialized Facts provides the best message to increase support for the measures to change the criminal justice system advocated by experts. The critical point here is that Pragmatism and Racialized Facts synergize to produce effects that neither the value alone nor the facts alone achieve. Comparing the effects of the Pragmatism + Racialized Facts combination frame (the green bars) against the Pragmatism value (the blue bars) and the Racialized Facts messages (the red bars) across the outcome dimensions in Figure 5 documents this Ainding. In three of the four cases, the combination causes more productive movement than the value in isolation and, in the Juvenile Justice area, the difference between the combination frame and the values frame is minimal. Recommendations 1. Advocates need to provide more than just the facts. Put simply, unframed facts do little to win support for the measures experts recommend. While the facts detailing the current problems in the criminal justice system are indisputably true and undeniably stark, by themselves they lack sufficient power to change the conversation and move public support. In nearly all cases, unframed facts produced no movement on this study’s outcome measures. Of the two exceptions, Internationalized Facts actually decreased support for measures designed to address racial disparities in the system. Racialized Facts moved respondents toward identifying the system as the cause of criminal justice problems, but this effect is minimally significant and dramatically overshadowed by positive movement produced by value-fact combination frames. In short, the 8,000 respondents in this study, who statistically match the population of the United States, required a more refined messaging strategy. Specifically, the findings show that Americans need a way of understanding these facts — they need an “interpretive bridge.” This bridge, provided by the value portion of the frame, allows people to move from merely observing uncontextualized facts towards a more integrated and comprehensive worldview about public safety and criminal justice. In particular, the value bridge provides a foundational motivation by answering the question: What is at stake with criminal justice reform and why should I care? This motivation acts as an antidote to cynicism, fatalism and hopelessness, prompting people to resist the tendency to withdraw when faced with dramatic public crises centered on seemingly insoluble problems.

#### Info oversaturation is inevitable and good – debate creates the skills necessary to translate ideas and information across differences

**Mitchell 10** [Gordon R. - Associate Professor and Director of Graduate Studies in the Department of Communication at the University of Pittsburgh, where he also directs the William Pitt Debating Union. “Switch-Side Debating Meets Demand-Driven Rhetoric of Science”, Rhetoric & Public Affairs Vol. 13, No. 1, 2010, pp. 95–120] bjs

Evidence and Argument Fields in Intelligence Community Deliberations **“The axiom of all rhetoric” is the “principle of insufficient reason,”** says Hans Blumenberg.13 In this formulation, **when a pressing situation calls for action,** but all the facts are not yet in, **rhetoric lends practical guidance to those seeking to navigate uncharted waters**. In Lloyd Bitzer’s shopworn terminology, such **“rhetorical situations” are meaning vacuums that** invite, even **“call” discourse t**o the scene as “fitting” **remedies for the “imperfect” state of affairs**.14 **Yet the current era of “content abundance”15 seems to invert** **this** commonly held **sense of the rhetorical situation**, as **we struggle to stay afloat in the wake of new waves of facts**, figures, **and testimony churned out by today’s proliferating sites of knowledge** production.16 According to Richard Lanham, “**we’re drowning” in this endemic state of surplus information**, **struggling to marshal sufficient attention to make sense of** it all.17 To capture this sense of inundation, Damien **Pfister coins the term “hyperpublicity” to describe the “massive expansion in the capacity of personal media to record**, archive, and make searchable thoughts, events, and interactions in publicly accessible databases.” **In this meaning-saturated environment,** which has “**double potential to enrich and threaten public life,”**18 **the challenge has less to do with figuring out how to make practical decisions** based on scarce shreds of evidence (rhetoric filling a lack) **and more to do with sorting through ever-expanding mounds of evidence whose relevance to pressing decisions may not be immediately apparent** (rhetoric responding to a surplus). **The** official **U.S.** **intelligence community routinely faces such inverted rhetorical situations** when it is called upon to deliver consensus judgments such as National Intelligence Estimates. To reach such judgments, analysts must comb through terabytes of digital data from sigint (signals intelligence gathered from satellites and other monitoring devices), humint (human intelligence drawn from informants and agents), as well as a burgeoning supply of “open source” intelligence (data in the public domain). As the community is composed of 16 separate agencies and entities that each serve diff erent customers and pursue distinct approaches to intelligence analysis, heterogeneous perspectives often complicate the process of sorting the proverbial wheat from the chaff . As Simon and Hart explain, “**the basic problem** **stems from** **moving knowledge created using evidence** and analysis **in one group or organisation into another**. This is not a trivial undertaking, because the process, language and ultimate purpose of the created knowledge often differ radically between the originating and receiving organisations.” As a result, “analyses involving jihadist perceptions or technical details concerning chemical, biological or nuclear weapons can often generate interpretive or semantic differences between originating and receiving organisations as to what a word, measurement or outcome actually means.”19 Here, centrifugal forces of professional specialization and horizontal knowledge diff usion scatter the pool upon which analysts draw data. Simultaneously, centripetal forces oblige these same analysts to synthesize vast sums of diverse information and render coherent arguments on complex and multifaceted issues. This challenge stems from a tension borne from the push brought about by the splintering of the intelligence community into disparate agencies, on the one hand, and the pull of institutional directives requiring coordination of intelligence products, on the other. **Surmounting this complex epistemological dilemma requires more than sheer information processing power; it demands forms of communicative dexterity that enable translation of ideas** **across differences** a**nd facilitate cooperative work by interlocutors** from heterogeneous backgrounds. **How can such communicative dexterity be cultivated**? **Hart and Simon see structured argumentation as a promising tool in this regard.** In their view, **the unique virtue of rigorous debates** is that they “**support diverse points of view while encouraging consensus formation.” This dual function of argumentation provides “both intelligence producers** and policy consumers **with a view into** the **methodologies** and **associated** evidence used **to produce analytical product**, effectively **creating a common language** **that might help move knowledge across organisational barriers without loss of accuracy or relevance.”**20 Hart and Simon’s insights, coupled with the previously mentioned institutional initiatives **promoting switch-side debating** in the intelligence community, **carve out a new zone of relevance where argumentation theory’s salience is pronounced and growin**g. Given the centrality of evidentiary analysis in this zone, it is useful to revisit how argumentation scholars have theorized the functions of evidence in debating contexts. In the words of Austin Freeley, **“evidence is the raw material of argumentation.** It consists of facts, opinions and objects that are used to generate proof.”21 Here, **evidence becomes the “factual foundation for the claims of the advocates.**”22 When an interlocutor attempts to forward claims based on data, “the process of advancing from evidence to conclusion is argument.”23 What are the different types of evidence? Which are most persuasive in certain situations? How can evidence be misused? What doesn’t count as legitimate evidence? In the field of argumentation, scholars have long grappled with these questions, often by developing idiosyncratic taxonomies of evidence usage.24 So, for example, one textbook breaks down types of evidence into three categories—examples, statistics, and authority—and three sources—original, hearsay, and written.25 An earlier eff ort identifies three “forms of data that provide proof for a claim” as unwritten, ordinary, and expert.26 In a blistering critique, Dale Hample questions the usefulness of these projects: “The typologies—for they are indeed plural—diff er from textbook to textbook and have never been defended as having any phenomenal reality for anyone not taking an argumentation exam.”27 One factor accounting for the limited conceptual appeal of these evidence taxonomies is that such schemes are tied tightly to the practical activity associated with their development—**intercollegiate debating**. Since as Dean Fadely points out, the “bedrock of contest debate” is evidence,28 it is only natural that many of these taxonomical efforts are designed to support student classroom work. For example, the preface to Robert and Dale Newman’s 1969 Evidence explains, “This book **is designed primarily for students of exposition, discussion, persuasion, and argument who must buttress their speeches or essays with evidence**.”29 **Such a pedagogical** **orientation** underwrites the practical dimension of evidence studies, where the emphasis **rests on cultivating invention skills sufficient to enable students to research, deploy, and defend evidenced claims in argumentative situations**.30

#### Transparency key to fight climate change and reduce carbon emissions

**Fagotto and Graham 07** (Elena Fagotto and Mary Graham, Elena Fagotto is the Transparency Policy Project’s Director of Research. She has been affiliated with the Project since its inception and her research focus on information disclosure, regulatory policy, and transnational regulatory regimes. She has analyzed dozens of US and international transparency policies and has published extensively on the role of information disclosure as a regulatory tool and on institutional designs to make transparency more effective. She is a graduate of Harvard Kennedy School and LUISS University in Rome. She has a PhD in Law and Economics from Erasmus University Rotterdam and Mary Graham co-directs the Transparency Policy Project. Graham’s research focuses on the politics of public disclosure, information strategies to improve public health and safety, new trends in environmental policy, and the struggle between government openness and secrecy in the United States, “Full Disclosure: Using Transparency to Fight Climate Change”, Issues in Science and Technology)

Congressional **leaders are finally working seriously on long term-approaches to counter climate change.** **But all the major proposals leave a critical policy gap because they would not take effect for at least five years.** Meanwhile, U.S. greenhouse gas emissions continue to increase, and company executives continue to make decisions that lock in the emissions of future power plants, factories, and cars. **Congress could fill that policy gap now by requiring greater transparency.** In the immediate future, **legislating product labeling and factory reporting of greenhouse gas emissions would make markets work better. Such disclosure would expose inefficiencies and allow investors, business partners, employees, community residents, and consumers to compare cars, air conditioners, lawn mowers, and manufacturing plants.** As people factored that **information** into everyday choices, **company executives would have new incentives to cut emissions sooner rather than later.** **Greater transparency would also help jump start whatever cap-and-trade or other regulatory approach emerges from the current congressional debate. A carefully constructed transparency system is therefore an essential element of U.S. climate change strategy.** Such a system would fill a legislative void and provide immediate benefits as Congress continues its debate. Congress is debating long-term approaches to climate change. Barbara Boxer (D-CA), chair of the Senate Environment and Public Works Committee, and John Dingell (D-MI), chair of the House Energy and Commerce Committee, are holding wide-ranging hearings, and Speaker Nancy Pelosi (DCA) has created a select committee to coordinate climate change action in the House. Three major bills propose variations on a cap-and-trade approach to cutting greenhouse gas emissions. All combine industry emission limits or “caps” with government-created markets for trading emission permits. The bills differ mainly in the progressive severity of caps and in how they are set. The most ambitious proposal, introduced by Boxer and Sen. Bernie Sanders (I-VT), proposes caps that would reduce emissions to 80% below 1990 levels by 2050. Ironically, though, even if the 110th Congress approves some variation on a cap-and-trade approach, the new law will not create any immediate incentives for manufacturers, power providers, factory farms, and other major contributors to reduce emissions. If President Bush signed such legislation in 2008, his action would only signal the beginning of another debate over the rules that would govern the system. That debate is likely to be long and acrimonious because the fine print of the regulations will determine which companies are the real winners or losers from government action. Regulations will govern the mechanics of trading emission permits, the allocation of “caps” among industries and companies, and the timing of compliance—all costly and contentious issues for energy-intensive businesses. Such delay may be inevitable but its costs will be high. Even conservative projections conclude that U.S. greenhouse gas emissions will continue to increase rapidly during the next decade and will produce increasingly serious consequences. The administration’s latest climate action report, circulated in draft, projects that a 19% increase in emissions between 2000 and 2020 will contribute to persistent drought, coastal flooding, and water shortages in many parts of the country and around the world. That increase could be as high as 30% under a business-as-usual scenario. The U.S. Environmental Protection Agency (EPA) reports that carbon dioxide emissions, the most common greenhouse gas, increased by 20% from 1990 to 2005, and emissions of three more potent fluorinated gases, hydrofluorocarbons, perfluorocompounds, and sulfur hexafluoride, weighted for their relative contribution to climate change, increased by 82.5%. The United States still holds the dubious distinction of being the world’s largest producer of greenhouse gases. Each large contributor to increasing U.S. greenhouse gas emissions has a unique story. Carbon dioxide emissions from generating electricity, responsible for 41% of total U.S. emissions from fossil fuel combustion in 2005, continue to increase faster than energy use because dramatic increases in the price of natural gas have led some power providers to increase their reliance on coal. The most recent estimates of the federal Energy Information Administration project that such emissions will increase 1.2% a year from 2005 to 2030. (The burning of petroleum and natural gas results in 25% and 45% less carbon emissions per unit respectively than does the burning of coal.) Power companies are investing now in facilities that will shape the next half-century of electricity generation—and the next half-century of greenhouse gas emissions. Many of the more than 100 new coal-fired power plants on the drawing boards will have useful lives of 50 years or more. Carbon emissions from the incineration of municipal solid waste, not even including paper and yard trimmings, increased 91% from 1990 to 2005 as more plastics, synthetic rubber, and other wastes from petroleum products were burned. Carbon emissions from cement manufacture increased 38% as construction activity increased to meet the demands of the growing U.S. economy. Carbon emissions from the burning of gasoline, diesel fuel, and jet fuel to power cars, trucks, planes, and other forms of transportation increased 32% during the same period because of increased travel and “the stagnation of fuel efficiency across the U.S. vehicle fleet,” according to the EPA. Executives will need powerful incentives to alter current plans in order to make significant reductions in greenhouse gas emissions any time soon. Most are understandably reluctant to place their companies at a competitive disadvantage by making bold and often costly emission-cutting moves unilaterally. In fact, the prolonged congressional debate may make executives more reluctant to act early since their companies may reap large emission-cutting credits once regulations take effect. **So far, neither the administration nor Congress has come up with any way to reduce greenhouse gas emissions in the next critical years. A carefully constructed transparency system would mobilize the power of public opinion, inform choice, and help markets work better now.** Requiring **disclosure for each proposed and existing major factory and power plant as well as for each new car, truck, furnace, refrigerator, and other energy-intensive product would expose their relative carbon efficiencies as well as their total contributions to such emissions. Once disclosed, emissions data could be used by mayors and governors to design and carry out emission-reduction plans;** **by local zoning and permitting authorities to place conditions on the construction or alteration of plants; by investors to more accurately predict material risks; by consumers to choose among cars, air conditioners, and heating systems; and by employees to decide where they want to work. Environmental groups, industry associations, and local and national media could use the information to help to pinpoint the most inefficient factories and cars. Equally important, shining a light on factory and product emissions would allow chief executive officers (CEOs) and their business partners and competitors to see for the first time their relative efficiency and to put pressure on bad actors.** **Requiring CEOs to sign off on annual reports would ensure that that information worked its way to the top of the managerial ladder.** The collective effect of **new information and changed choices would create incentives for managers to take feasible steps toward reducing greenhouse gas emissions sooner rather than later.** Requiring such reporting is politically feasible. **A transparency requirement could break the political logjam that has held up climate change legislation in Congress. Transparency often has broad appeal to both Democrats and Republicans because it empowers ordinary citizens, strengthens market mechanisms, and allows executives to choose what actions to take in response.** **Many corporate leaders would support transparency because it would reward companies for reducing emissions early, help them manage their own risk, and provide them with data on which to base their response to a future cap-and-trade requirement. The critical prerequisites for an effective transparency policy are already in place.** That is important because transparency policies do not always work. Public indifference, battles over how to measure progress, or the absence of real opportunities for investors, consumers, or disclosing companies to take meaningful action can turn a well-intentioned policy into a meaningless paperwork exercise. **To be effective, transparency policies need consensus metrics, feasible emission reductions, interested consumers of information who have real choices, and the support of at least some disclosing companies able to improve products and practices. Metrics for measuring greenhouse gas emissions are good enough to support a disclosure system and will get better.** An internationally accepted protocol to measure and report emissions has been tested in a variety of real-world settings including markets such as the European Union’s cap-and-trade system, the Chicago Climate Exchange, and California’s greenhouse gas registry. A new profession of auditors has already emerged to certify the accuracy of company reporting of such emissions. There are signs that key groups are ready to weigh emissions in making routine decisions. Investors have shown increasing interest in factoring into their stock purchases risks associated with climate change. AIG, Goldman Sachs, and other U.S. investment firms support a London-based carbon disclosure project that aims to meet the needs of institutional investors for information about company emissions. The project is supported by 280 investment groups with assets of more than $41 trillion, according to the project’s Web site. In 2005 and 2006, climate change issues also produced the largest number of nonfinancial shareholder resolutions in the United States. **Executives of the California Public Employees’ Retirement System, one of the nation’s largest pension funds, said that they supported such resolutions at General Motors and Ford in order to improve the transparency of environmental data. Leading U.S. corporations already preach the benefits of transparency, and some have sought competitive advantage by voluntarily disclosing company-level emissions.** A coalition of firms and environmental groups that includes General Electric, Alcoa, Duke Energy, Environmental Defense, the Natural Resources Defense Council, and the World Resources Institute in a climate-action partnership has recommended the creation of a national registry of greenhouse gas emissions. **Wal-Mart, Home Depot, Boeing, American Express, and other large U.S. companies have joined the London-based carbon-disclosure project.** Likewise, **state governments and consumers have shown increasing interest in greater transparency**. In May of this year, **a group of 31 states launched a multistate greenhouse gas registry to which companies, utilities, and government can voluntarily report their emissions. A few companies in the United States and Europe have undertaken costly carbon labeling of products, banking on the idea that consumers care enough about such emissions that reporting low emissions will boost sales. Footwear manufacturer Timberland recently assigned “green index” ratings to shoes that report the amount of greenhouse gases released in their production. In the United Kingdom, the supermarket chain Tesco is launching labels that specify the carbon footprint of thousands of its products and reports that it will spend nearly $1 billion over the next five years to stimulate “green consumption.” The Carbon Trust, an organization funded by the British government to help businesses reduce their carbon emissions, is helping companies devise carbon labels for brand-name products such as Walkers snacks and Boots shampoos. The British government recently unveiled a plan to develop standard metrics for greenhouse gas emissions of products and services as a first step towards a green labeling system that would guide consumers’ and businesses’ choices. In the United States, polls show broad public concern about climate change: 90% of Democrats, 80% of independents, and 60% of Republicans favor immediate government action, according to a New York Times/CBS poll released in April 2007. Members of Congress are beginning to heed demands for better information. A recent proposal by Senators Amy Klobuchar (D-MN) and Olympia Snowe (R-ME) would add greenhouse gases to the factory-by-factory toxic chemical disclosure requirement.** Reducing emissions is also feasible. Although some substantial cuts in greenhouse gas emissions must await technological advances, others can be achieved with existing technology, as European companies, now subject to cap-and-trade restrictions, have demonstrated. For example, **British Petroleum, the world’s third-largest oil company, cut carbon emissions by 10% between 1998 and 2002 by introducing new energy-efficiency measures** and by creating an internal emissions-trading scheme among its 150 business units in more than 100 countries. Government action is needed. Voluntary disclosure will not create incentives for broad emissions reductions for three reasons. It does not allow investors, employees, or consumers to compare all major products and facilities. It cannot assure standardized metrics. And it cannot provide enforcement to ensure that reporting is accurate and complete. As state and private initiatives multiply, only a national reporting requirement can level the playing field for disclosers by ensuring consistent reporting. **When public risks are serious, legislated transparency offers the permanence, legitimacy, and accountability that increase the chances that disclosed information will truly serve policy priorities.** Likewise, disclosure of company-level emissions, rather than disaggregated factory and product emissions, is not enough. When companies have dozens and sometimes hundreds of business lines, the reporting of total emissions does not give consumers and investors the information they need to discern relative efficiencies and trends and to incorporate new information into decisions.**The power of transparency has worked in the past to reduce harmful pollution. After a disastrous chemical accident at a pesticide plant in Bhopal, India, in 1984, killed 2,000 people, Congress required U.S. companies to disclose their toxic emissions factory by factory and chemical by chemical. When they saw the first numbers, shamefaced executives promised immediate reductions. CEOs of Monsanto, Dow Chemical, IBM, and other major companies made commitments to cut toxic pollution by as much as 90% within a few years. The EPA later credited that simple disclosure requirement with reducing reported toxic pollution by as much as half in the 1990s. Both positive and negative lessons learned from toxic chemical disclosure can provide a template for structuring transparency to reduce greenhouse gas emissions. Using transparency requirements to reduce public risks is no longer unusual. In recent years, Congress has frequently constructed transparency systems to reduce specific health, safety, and environmental risks. In addition to toxic pollution reporting, automobile safety ratings, nutritional labels, drinking water quality reports, workplace hazards reporting, and dozens of other laws have been enacted in recent years that aim to create specific incentives for companies to improve their products and practices. At best, such policies mobilize market forces and empower the choices of consumers, investors, employees, and business partners with relatively light-handed government intervention. In fact, the United States has fallen behind other countries by not requiring factory reporting of greenhouse gas emissions.** Plants in the European Union have been required to disclose their greenhouse gas emissions since 2000 as part of a larger pollution-reporting system. Energy, metals, minerals, chemicals, waste management, paper, and other major industries report emissions if they rise above certain thresholds under guidelines set up by each nation. Reports are aggregated in a user-friendly European Pollutant Emission Register (EPER) Web site. Citizens can search at by inserting a factory name and greenhouse gas, or by placing their cursor on a geographical area of interest and zooming in. They can compare emissions from different factories, view satellite images of factories, and find out whom to contact. The European Union’s (EU’s) reporting requirements have become more rigorous over time, suggesting that greater transparency is gaining broad support. At first, the EU required reporting every three years (2001 and 2004 data are available), but now requires annual reporting. It has also expanded the scope of reporting to disclose more sources of emissions, including road traffic, aviation, shipping, and agriculture. Early evidence suggests that EPER information is used by local and national administrators, businesses, environmental groups, and the public at large. Factories are also required to report their carbon emissions under the EU’s cap-and-trade system, launched in 2005, in order to verify emission levels and administer allowances. Those reports are available at <http://ec.europa.eu/environment/ets/>. The EU also mandates the disclosure of carbon dioxide emissions and fuel consumption by car model in order to inform consumers’ choices. Car dealers are required to feature this information in their showrooms, either on posters or Web sites, and to post rankings of their car models by carbon emissions, with greener models at the top of the list. Some countries aggregate this information on Web sites. The UK Vehicle Certification Agency, [www.vcacarfueldata.org.uk](http://www.vcacarfueldata.org.uk/), provides an example. European subsidiaries of U.S. companies are already required to report factory and automobile emissions under these rules. The United States’ closest neighbors are also moving ahead in requiring factory reporting of greenhouse gas emissions. In 2004, Canada began requiring large contributors to greenhouse gases (factories that produce more than 100,000 tons of greenhouse gas) to disclose emissions every year. Additional factories have reported voluntarily. In 2001, Mexico required electronic disclosure of greenhouse gases by factory and chemical, with results available at . Cement companies, several iron and steel companies, and the nationalized oil and gas company Pemex also report under a voluntary program that was launched to provide company-level data while the mechanics of required disclosure were being worked out. How would factory and product disclosure lead to reductions in greenhouse gas emissions? Transparency policies rely on a fortuitous chain of reaction. Managers of companies whose products or processes are large contributors to greenhouse gas emissions disclose those emissions using standardized metrics. Consumers, investors, job seekers, community residents, and government officials use that information to make decisions about what products to buy, what companies to invest in, where to work, and whether to grant permits to new or expanded businesses in their neighborhoods or cities. Perceiving these changed preferences, executives reassess the costs and benefits of emissions and make whatever reductions they believe would improve their company’s competitive position. Managers respond to transparency policies for three reasons. First, disclosure requirements sometimes provide information that is new to managers themselves and that suggests opportunities to enter new markets or reduce waste. Managers may see opportunities to develop low-carbon products and services or to employ greenhouse gas wastes in manufacturing, for example. Second, disclosure can create new competitive risks, by reducing demand for carbon-intensive products, for example. Third, disclosure can create new reputational risks and benefits as investors and consumers compare factories and products. What can go wrong? Transparency policies can fail for many reasons. People often simply do not notice or understand new information. Even when they do notice it, they may not factor it into key decisions. If many consumers and investors do vote with their wallets for lower emissions, companies still may fail to discern the reason for their changed choices. And, of course, even if companies accurately track changes in preferences, they may nonetheless decide not to reduce emissions. The architecture of transparency is therefore critical to its effectiveness. Principles of effective design can reduce the chances of transparency failure. Provide information that is easy for diverse audiences to use. To be factored into everyday decisionmaking routines, information must be provided at a time and place and in a standardized format that encourage its use by companies, investors, customers, business partners, and the public at large. Emissions information sent to customers with their utility bills, highlighted on product stickers, posted at factory entrances, and featured on company Web sites is accessible; information in government file drawers or complex databases is not. A rating system assigning stars, letter grades, or colors to cars or factories would enable consumers and investors to assess emissions information more readily. User-friendly Web sites maintained by neutral organizations can help ensure that data are available quickly and can be aggregated for fair comparisons. Because each user has different information needs, time demands, and capacity to understand technical terms, Web sites should allow people to compare the emissions and the relative efficiency of factories, power plants, new car models, and heating and cooling systems by asking specific questions. Strengthen groups that represent users’ interests. Advocacy groups, analysts, entrepreneurial politicians, and other representatives of information seekers have incentives to maintain and improve transparency systems. Policymakers can design systems to formally recognize the roles of such user groups in oversight, evaluation, and recommendations for improvement. Design in benefits for disclosing companies. When leading companies perceive benefits from improved transparency, policies are more likely to prove sustainable. Chemical companies aimed to avoid stricter pollution rules and reputational damage and to gain a competitive edge when they drastically reduced toxic pollution in response to new disclosure requirements and sought to broaden requirements to include other disclosers. Match the scope of disclosure to the dimensions of the problem at hand. To be fair and comprehensive, emissions reporting would have to include all major emitters—government agencies as well as companies—for their operations in the United States and abroad. Disclosure of emissions from subsidiaries based outside the United States would prevent the transfer of polluting operations to countries with less transparency and would provide a snapshot of company-wide greenhouse gas emissions that investors could use in their calculations to offset risks. Disclosure should cover stationary facilities and mobile sources and should also include both direct emissions and indirect emissions that result from the use of electricity. It should include both emissions per units of economic output and total tons of greenhouse gases, with a CEO certification of the accuracy of reports to ensure top-level attention. Design metrics for accuracy and comparability.Successful policies feature metrics that are reasonably well matched to policy objectives and allow users to easily compare products or services. Achieving comparability can involve difficult tradeoffs because simplification may erase important nuances and standardization may ignore or discourage innovation. Inevitably, disclosure systems start with imperfect metrics. The important question becomes whether those metrics improve over time. Greenhouse gas metrics are already good enough to support trading markets, and U.S. power plants already report carbon dioxide emissions as part of an established cap-and-trade system for acid rain pollution. Over time, the development of more sophisticated sensors (already used by power plants in the United States for monitoring carbon dioxide emissions) will fine-tune initial estimating techniques. Incorporate analysis and feedback. Transparency systems can grow rigid with age, resulting in a tyranny of outdated benchmarks. Generously funded requirements for periodic analysis, feedback, and policy revision can help keep emissions disclosure supple and promote adaptation to changing circumstances. The National Academy of Sciences or another impartial oversight group could be charged with periodically assessing the fairness and effectiveness of the disclosure requirement and its metrics, and regulators could be required to consider those impartial recommendations. Impose sanctions. Corporations and other organizations usually have many reasons to minimize or distort required disclosures. Information can be costly to produce and even more costly in reputational damage. As a result, substantial fines or other penalties for nonreporting and misreporting are an essential element of successful systems. Strengthen enforcement. Sanctions are not enough, however. Legal penalties must be accompanied by rigorous enforcement to raise the costs of not disclosing or disclosing inaccurately. Building in an audit function is one way to ensure ongoing attention to accurate reporting. The fact that there is still no systematic mechanism for auditing toxic pollution data provided by companies means that no one knows for sure how accurate or complete that data is. Leverage other regulatory systems. The power of transparency is strengthened when it is designed to work in tandem with other government policies. Emissions disclosure can be constructed to reinforce cap-and-trade regulation and possible future carbon taxes, for example. Transparency usually serves as a complement to, rather than a replacement for, other forms of public intervention. The information wars will continue, of course. There will be struggles over how to measure emissions from dispersed sources such as agriculture and other land-based activities. There will be questions about whether estimates of emissions are good enough and whether or when to use sensors for precise measurements. There will be debates about whether facility and product reporting gives away trade secrets. Nonetheless, a carefully constructed transparency system is an essential and currently neglected element of an eventual portfolio of U.S. measures to counter climate change. In the near future, it also fills a serious policy gap by providing immediate incentives for reductions of greenhouse gas emissions, in a politically feasible first step.

#### Info isn’t dissuasive – overwhelming research proves – and, the alt’s implosion fails and only risks *heighted conservatism*

**Robinson 04** [Andrew, http://andyrobinsontheoryblog.blogspot.com/2004/11/baudrillard-zizek-and-laclau-on-common.html]

Baudrillard's claim that the masses are "dumb", silent and conduct any and all beliefs (SSM 28) and "the reversion of any social" (SSM 49) is problematised by the persistence of subcultures and countercultures, while his claim that any remark could be attributed to the masses (SSM 29) hardly proves that it lacks its own demands or beliefs. He is leaping far too quickly from the confused and contradictory nature of mass beliefs to the idea that the masses lack - or even reject - meaning per se. He wants to portray the masses as disinterested in meaning, instinctual and "above and beyond all meaning" (SSM 11), lacking even conformist beliefs (87-8) and without a language of their own (22). This is contradicted by extensive evidence on the construction of meaning in everyday life, from Hoggart on working class culture to Becker, Lemert, Goffman and others on deviance. Even in the sphere of media effects, the evidence from research on audiences, such as Ang on Dallas viewers and Morley on the Nationwide audience, suggests an active construction of meaning by members of the masses, negotiating with or even opposing dominant codes of meaning. This may well show a decline of that kind of meaning promoted by the status quo - but it hardly shows a rejection of meaning per se. When the masses act stupid, it may well be due to what radical education theorists term "reactive stupidity" - an adaptive response to avoid being falsified and "beaten" by acting stupid. Baudrillard again wrongly conflates the dominant system with meaning as such. Indeed, Baudrillard seems to have changed his mind AGAIN by the time of the Gulf War essays, when he refers to the MEDIA, not the masses, as in control (GW 75), and to stupidity as a result of "mental deterrence" (GW 67-8), which produces a "suffocating atmosphere of deception and stupidity" (GW 68) and a control through the violence of consensus (GW 84). Baudrillard's view that the masses respond to official surveys and the like in a tautological way (SSM 28) may well be true, without proving what Baudrillard claims it does about the absence of meaning in the masses. The attitudes of subaltern groups towards dominant beliefs has often taken such forms throughout history, but this does not preclude the parallel existence of what Jim Scott terms "hidden transcripts" - a parallel set of beliefs with a separate structure of meaning which are not compromised by power. Baudrillard does not dig deep enough into evidence on mass culture to assess whether such transcripts exist or not. He simply assumes the omnipotence of the official, "public" system of meaning. Further, his claim that what passes through the masses leaves no trace (SSM 2) is very problematic, as his claim that the masses are the negation of all dominant meanings (SSM 49). There are some very strange 'proofs' in Baudrillard's work: for instance, the claim that people don't believe the myths they adopt rests on the statement that to claim the opposite is to accuse the masses of being stupid and naive (SSM 99-100). He does not explain why we should not believe this - especially since he elsewhere calls them "dumb like beasts"! Occasionally, Baudrillard acknowledges evidence against his approach: namely, the research of the "two-step flow" theorists on audience effects, and also the kind of syncretic resistances analysed by Scott, which resist the dominant social system and reinterpret or "recycled" its messages towards different codes and ends, often linked to earlier social forms (SSM 42-3). However, he does not dwell on such evidence. This, he says, is simply a different issue, unrelated to the question of the MASSES as "an innumerable, unnameable and anonymous group" operating through inertia and fascination (SSM 43-4). Attempts to recreate meaning at the periphery are a "secondary" matter (SSM 103-4). Similarly, at times, Baudrillard admits both the unsatisfactory nature of the society of the spectacle for many of its participants, and the existence of spheres of belief and discourse beyond its borders. For instance, people don't fully believe the hyperreality which substitutes for reality (SSM 99); some groups, so-called "savages" such as the Arab masses, are not submerged in simulation and can still become passionately involved in, for instance, war (GW 32); the real still exists underground (GW 63). Indeed, although his analysis of the Gulf War suggests that the WEST is trapped in simulacra, his account of the rest of the world suggests it follows a different logic (eg GW 65). Wars or non-wars today are waged by the west against symbolic logics which break with the dominant system, such as Islam (GW 85-6), to absorb everything which is singular and irreducible (GW 86). Also, though he thinks the risk of it is low, he admits that an accident, an irruption of Otherness, or an event which breaks the control exerted by information can disrupt the "celibate machine" of media control (GW 36, 48). If this is the case, however, there is no basis for assuming its totality, and it is still meaningful to try to win people over to alternatives. In SSM Baudrillard retreats from this analysis, suggesting the reduction of society to a rat race is a result of the masses' resistance to 'objective' economic management (SSM 45) - the system benefits as a result but that is not the main issue. This contrasts with Baudrillard's earlier analyses and also those of others such as Illich, who see the destructive social effects of such competition. However, Baudrillard does attack "the social", which he identifies with control through information, simulation, security and deterrence (SSM 50-1) - though how it can be resisted since he thinks it "produces" us is never explained. Baudrillard tends to conflate existing dominant beliefs with thought and meaning per se. As a result, he leaves it impossible to critique dominant ideas in a meaningful way. For instance, he poses political problems in terms of "resistance to the social", with the social in general being conflated with the EXISTING social system (SSM 41); ditto on the existing sign system, which Baudrillard identifies with meaning per se. In such cases, Baudrillard misses the whole question of countercultural practices and the creation of alternative hegemonies. Baudrillard's conflation of meaning per se with dominant beliefs leads to a refusal to countenance the possibility of transforming mass beliefs. Raising the cultural level of the masses, Baudrillard claims, is "Nonsense" because the masses, who want spectacle rather than meaning, are resistant to "rational communication" (SSM 10). An "autonomous change in consciousness" by the masses, Baudrillard tells us, is a "glaring impossibility" (SSM 30) - though he never tells us how he deduces this. Furthermore, he also claims that people who try to raise consciousness, liberate the unconscious or promote subjectivity "are acting in accordance with the system" (SSM 109). This anathematisation is a result of Baudrillard's strange claim that the system's logic is based on total inclusion and speech! It is on this basis that Baudrillard rejects argument based on empirical claims and locates truth outside such claims (SSM 121-2). From the second pole of his contradictory argument about the masses, which portrays them as de facto agents engaging in resistance, defiance and so on, Baudrillard wants to draw a politics starting from the refusal of meaning (SSM 15), and from the contradictory combination of the two he draws his model of hyperconformity as annulling control (SSM 30-3). He can't deal with the contradiction, especially since he uses terms which imply consciousness - such as ruse and offensive practice - when he admits the object of such terms is acting unknowingly (SSM 43). Indeed, he actually writes as if one can UNKNOWINGLY carry out a CONSCIOUS act (SSM 42). This is sinister, reproducing the Stalinist idea of objective alignment - especially when used against Baudrillard's theoretical rivals (SSM 123). Further, it is not clear from where he is deducing his idea that one can destroy a system by pushing its logic to the extreme (SSM 46), which he sees as a resistance to demands to participate (SSM 106-8). There are a few cases of the letter of the law being used to subvert its implementation, such as go-slows at work; these, however, are rooted in concrete practices elsewhere. There are also a few cases of hyperconformity disrupting official projects - for instance, the disastrous effects of Chinese peasants' literal reading of Maoist imperatives to (eg.) kill all birds. These, however, did not actually LIBERATE anyone or DESTROY the system; and most hyperconformity simply produces a more oppressive variant on the system - for instance, hyperconformist racism produces genocide. He also never sets out the stakes of the conflict between the masses and society or the effects of the masses' victories, though he vaguely links these to the (unspecified) goals of radical critics (SSM 49). Indeed, he uses the opt-out that our present epistemology prevents us knowing what possibilities would be offered by the system's destruction (SSM 52). Furthermore, to be a resistance, there would have to be an AGENT CHOOSING to be an object. Baudrillard's sectarianism is clearly shown by his belief that popular rethinking of ideas is always a "misappropriation" or "radical distortion" rather than an improvement (SSM 8). He also engages in a highly essentialist attack on popular ethics, representing the stress on real practices and small images in popular religion as "degraded", banal and profane, a way of "refusing the categorical imperative of morality and faith", as well as of meaning, because it stresses immediacy in the world (SSM 7-8). Popular ethics, as Hoggart, Scott and others show, is far more than a mere refusal, and its rejection of the transcendentalism of the intellectual allies of dominant strata is hardly evidence that they are degraded, banal or anti-ethical. Furthermore, on an empirical level, fatalism DOES occur in popular ethics, contrary to Baudrillard's claims. The problem is further complicated by Baudrillard's vague claim that something passes between the masses and terrorism (SSM 52-3), which seems to imply that isolated terrorist acts can somehow transform overnight the entire structure of meaning by rendering representation impossible and meanings reversible (SSM 54, 116), and which is also based on a definition of terrorism which is so restricted that it rules out virtually all actual "terrorists" and which Baudrillard admits (116) does not fit the identities of the Baader-Meinhof group, the one example he gives. His politics results directly from the artificial grimness of his analysis of popular beliefs, since it involves a radical subjectlessness and a random blow against victims who are punished for being nothing (SSM 56-7). Like Zizek, he calls for the suicidal destruction of one's own perspective (SSM 69-70), and denounces everything short of this as strengthening the system (SSM 72). Furthermore, his model of social change, which rests on the inevitability of implosive catastrophe (SSM 61), has no room for any human intervention. It simply assumes that another reality lies beyond our own perspective which can be reached in this way, but which is presently blocked by our way of thinking (SSM 104). Baudrillard substitutes "logical exacerbation" and "catastrophic revolution" for alternatives (SSM 106), and locates the frontier of struggle at the level of "production of truth" (SSM 123). The progressive side of this struggle seems to involve unknowability and fascination. The lack of alternatives seriously blunts Baudrillard's critical force, and can even lead to conservative positions, such as portraying manipulation of the media as better than pursuing truth (GW 46).

# 1NR

## Cap Good

#### Cap sustainable---profit motive drives tech innovation, makes resources infinite --- it’s the only way to solve environmental collapse

McAfee 19—cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management, former professor at Harvard Business School and fellow at Harvard’s Berkman Center for Internet and Society (Andrew, “Looking Ahead: The World Cleanses Itself This Way,” *More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources—and What Happens Next*, Chapter 14, pg 278-292, Kindle, dml)

Only if needed /time

As today’s poor countries get richer, their institutions will improve and most will eventually go through what Ricardo Hausmann calls "the capitalist makeover of production." This makeover doesn't enslave people, nor does it befoul the earth. As today’s poor get richer, they'll consume more, but they'll also consume much differently from earlier generations. They won't read physical newspapers and magazines. They'll get a great deal of their power from renewables and (one hopes) nuclear because these energy sources will be the cheapest. They’ll live in cities, as we saw in chapter 12; in fact, they already are. They'll be less likely to own cars because a variety of transportation options will be only a few taps away. Most important, they'll come up with ideas that keep the growth going, and that benefit both humanity and the planet we live on. Predicting exactly how technological progress will unfold is much like predicting the weather: feasible in the short term, but impossible over a longer time. Great uncertainty and complexity prevent precise forecasts about, for example, the computing devices we’ll be using thirty years from now or the dominant types of artificial intelligence in 2050 and beyond. But even though we can't predict the weather long term, we can accurately forecast the climate. We know how much warmer and sunnier it will be on average in August than in January, for example, and we know that global average temperatures will rise as we keep adding greenhouse gases to the atmosphere. Similarly, we can predict the "climate" of future technological progress by starting from the knowledge that it will be heavily applied in the areas where it can affect capitalism the most. As we've seen over and over, tech progress supplies opportunities to trim costs (and improve performance) via dematerialization, and capitalism provides the motive to do so. As a result, the Second Enlightenment will continue as we move deeper into the twenty-first century. I'm confident that it will accelerate as digital technologies continue to improve and multiply and global competition continues to increase. We’ll see some of the most striking examples of slim, swap, evaporate, and optimize in exactly the places where the opportunities are biggest. Here are a few broad predictions, spanning humanity's biggest industries. Manufacturing. Complex parts will be made not by the techniques developed during the Industrial Era, but instead by three- dimensional printing. This is already the case for some rocket engines and other extremely expensive items. As 3-D printing improves and becomes cheaper, it will spread to automobile engine blocks, manifolds and other complicated arrangements of pipes, airplane struts and wings, and countless other parts. Because 3-D printing generates virtually no waste and doesn't require massive molds, it accelerates dematerialization. We'll also be building things out of very different materials from what we're using today. We're rapidly improving our ability to use machine learning and massive amounts of computing power to screen the huge number of molecules available in the world. Well use this ability to determine which substances would be best for making flexible solar panels, more efficient batteries, and other important equipment. Our search for the right materials to use has so far been slow and laborious. That's about to change. So is our ability to understand nature's proteins, and to generate new ones. All living things are made out of the large biomolecules known as proteins, as are wondrous materials such as spiders' silk. The cells in our bodies are assembly lines for proteins, but we currently understand little about how these assembly lines work—how they fold a two-dimensional string of amino acids into a complicated 3-D protein. But thanks to digital tools, we're learning quickly. In 2018, as part of a contest, the AlphaFold software developed by Google DeepMind correctly guessed the structure of twenty-five out of forty-three proteins it was shown; the second-place finisher guessed correctly three times. DeepMind cofounder Demis Hassabis says, "We [haven't] solved the protein-folding problem, this is just a first step... but we have a good system and we have a ton of ideas we haven't implemented yet." As these good ideas accumulate, they might well let us make spider-strength materials. Energy. One of humanity's most urgent tasks in the twenty-first century is to reduce greenhouse gas emissions. Two ways to do this are to become more efficient in using energy and, when generating it, to shift away from carbon-emitting fossil fuels. Digital tools will help greatly with both. Several groups have recently shown that they can combine machine learning and other techniques to increase the energy efficiency of data centers by as much as 30 percent. This large improvement matters for two reasons. First, data centers are heavy users of energy, accounting for about 1 percent of global electricity demand. So efficiencies in these facilities help. Second, and more important, these gains indicate how much the energy use of all our other complicated infrastructures— everything from electricity grids to chemical plants to steel mills—can be trimmed. All are a great deal less energy efficient than they could be. We have both ample opportunity and ample incentive now to improve them. Both wind and solar power are becoming much cheaper, so much so that in many parts of the world they're now the most cost-effective options, even without government subsidies, for new electrical generators. These energy sources use virtually no resources once they're up and running and generate no greenhouse gases; they're among the world champions of dematerialization. In the decades to come they might well be joined by nuclear fusion, the astonishingly powerful process that takes place inside the sun and other stars. Harnessing fusion has been tantalizingly out of reach for more than half a century—the old joke is that it's twenty years away and always will be. A big part of the problem is that it's hard to control the fusion reaction inside any human- made vessel, but massive improvements in sensors and computing power are boosting hope that fusion power might truly be only a generation away.

#### Cap solves poverty

Teixeira and Judis, 17—senior fellow at both The Century Foundation and American Progress AND editor-at-large at Talking Points Memo, former senior writer at The National Journal and a former senior editor at The New Republic (Ruy and John, “Why The Left Will (Eventually) Triumph: An Interview With Ruy Teixeira,” <http://talkingpointsmemo.com/cafe/why-left-will-eventually-win-ruy-teixeira>, dml)

Judis: In your book, you explain at several points that you are no longer a socialist and instead support a reformed capitalism. When we met many years ago, we were in a socialist organization. When did this transformation occur? Teixeira: What happened is that I began to think a lot about how economies actually work. When I was a socialist, I **didn’t think very carefully** and **long** about what **actually** a socialist economy would look like. I had this **general idea** that the capitalist system was **inefficient** and **prone to crisis** and that one should **somehow tamp down the profit motive** and limit the freedom of action of capitalists. But **the more I thought** about how economies worked, it was **hard to gainsay** that the market was **absolutely essential** for the efficient delivery of goods and services. And the more I read, the more I realized my viewpoint was closer to social democrats than to socialists. Capitalism needs to be **regulated**, it needs to be **pointed in the right direction**, you **need to have a big safety net**, but you **can’t replace it**. Judis: Was there something that happened, a book you read, that changed your mind? Teixeira: I would say it was an obscure book by Alec Nove called “The Economics of Feasible Socialism.” Judis: That’s amazing. I was deeply influenced by the same book. Teixeira: Nove was a historian of the Soviet Union. He came from a Menshevik family, and he basically laid out the way the standard conceptions of socialism that a lot of people on the left had couldn’t work. If you wanted to **think rationally about what’s feasible**, the way economies and people tend to work, you **had to have a market**. The goal as I see it is a mixed economy that works as well as possible, and of course you have not gotten that in the West for the last several decades. The mixed economy just needs improvement and modification. Judis: And what kind of improvements would that be? Teixeira; I favor what economists are calling a model of **equitable growth**. It would mean **substantial government investment** in creating new opportunities for the middle and aspirational classes. It could include a dramatic expansion of the educational system and a Manhattan-style investment in bringing down the price of clean energy and building the infrastructure to match. Granted, these kind of proposals would not get through Congress now, but it is the kind of agenda that I am optimistic that the Democrats will endorse and that the country will **eventually embrace**. The Left Prospers in Prosperity Judis: Your book is titled “The Optimistic Leftist,” but if you look at the terrain of politics today, the center-left or left of center parties are decimated. The Democrats haven’t been in such bad shape nationally and in the states since the 1920s. The Dutch Labor Party got less than 10 percent in the recent election. Jeremy Corbyn and British Labor may be routed in June. The French Socialist candidate came in fifth with 6 percent. Why is this happening? And given that this is happening, what grounds do you have for thinking that the left will suddenly find itself on top? Teixeira: The way I look at it we are going through a **long transition** from an industrial capitalist system to a **post-industrial services-based capitalist system**. So far this transition has **not gone well**. It hasn’t had the outcomes that people want. We have **slow productivity growth** and **rising inequality**. The central point I’d make is that **by and large**, **poor economic times** are **not good for the left**. They **make people reactive**, **pessimistic**, **trying to hold onto their own**, and **not supportive of collective endeavors** to help the way society functions. And we’ve seen all that in spades in the last decade. Really that kind of situation is **best for the right**, and the left has had a very difficult time figuring out a way forward. The Democrats have their problems, but in Europe, you see the problems crystallized. Europe’s mainstream left was based in the industrial working class and has had a terrible time adjusting to the transition to post-industrial capitalism and figuring out what a new model of capitalism and capitalist growth would look like. They have thrown in their lot with a much more right-wing approach, beginning with the Third Way in the ’90s. The idea behind it was that capitalism can pretty well function on its own and we just have to let it rip. We’re still coming out of that phase, and I think the mainstream social democrats with their collaboration with austerity in places like France and the Netherlands are reaping the whirlwind. But if you look at other parts of the left, they are actually doing relatively well. If you look at the Netherlands election, the green left did very well, and if you add up the votes of the Socialist Party (a left-socialist party), the greens, Democrats 66 (a left social-liberal party) and the social democrats, the left **hasn’t been totally decimated**. What has really been decimated is the Party of Labor, as the social democrats in the Netherlands are called. We are seeing the same thing in France where the Socialist Party (the French social democrats) candidate did terribly, but [independent socialist Jean-Luc] Melenchon did quite well. The left **still has strength**, but it is **divided up among different political tendencies**. It is going to have to **reorganize itself around an economic program** that is going to deliver what people want, which is **better growth** and **better distribution**. Until that happens, the left will be **in a quagmire**. Judis: I want to look more closely at your argument that the left does better in good times and the right in bad times. Bill Clinton got elected in the wake of a recession in 1992, Barack Obama might not have won the presidency in 2008 if the financial crash hadn’t happened that September. The Populists came out of the farm crisis in 1880s and early 1890s; the New Deal out of the Great Depression. I am not saying that bad times is better for the left, but only that there isn’t a necessary connection in either case and that you are making too facile an assumption about which times promote which politics. Teixeira: Bad times do propel people into motion and produce protest and reaction, but looked at from when you can accomplish the goals of the left of **making society better** and **implementing important reforms**, I think it is **typically easier** when the economy is **expanding fairly rapidly** and **living standards are going up** than when the reverse is true. It is **not a perfect relationship**, but **by and large** I think it’s true. So yeah, Obama can get elected in a situation where he was aided by an economic downturn, but his ability to **put together a progressive coalition** that could **stick together for a long time** and continue to implement reforms was **very much undermined by the economic situation**. Judis: Let’s turn it around and look at the connection between the right and good and bad times. In America, the 1920s were relatively good times, and the Republicans controlled the government the whole decade. Teixeira: The 1920s were not nearly as good a time people think it was. It was a time of relatively slow per capita income growth. It was very unequally distributed, the industrial working class did somewhat well, but the rural areas did poorly, and there were four recessions between 1918 and 1929. It was not such a great time. It was relatively poor compared to the Progressive Era. Judis: So the Republicans did well in the 1920s because they were really bad times? Teixeira: There was a sense of real uncertainty, real economic paranoia. Judis: I don’t think you could call the 1920s bad times. You could call it uneven times. “Bad times” is stretching it. In addition, you have the real bad times of the Depression staring you in your face which is the time of the greatest advance in terms of a left and social democracy in our history. Teixeira: Desperate times make for desperate measure sometimes. There is **no guarantee they will help the left rather than the right**. I think that’s what we saw in the U.S. Obviously it didn’t work out so well in Europe. When I make the general analysis that the left is better off in a period of economic expansion and rising living standards, it doesn’t correspond exactly to the political outcomes you’ll have in those different periods. I am saying that **in a general sense**, the left has the **easiest time making advances** and **improving society** when things are going well **rather than when are going poorly**. Judis: Let’s look at Europe. In some of the countries in Northern Europe that are doing well, the center-right parties are in charge. Teixeira: Yes, but I think you can make the case the center-right parties aren’t exactly in charge in Europe. They also have their problems. The rise of populism in Europe is blowing apart the party system. Judis: You have got Holland, Denmark, Germany, and Austria. Those are all countries that are doing pretty well compared to the rest of the EU and that have center-right governments. Teixeira: The Netherlands is not doing that well. It’s all relative. Their recovery has been somewhat better. Their employment level has been high compared to other European countries, but there are a number of cuts in social services, wages haven’t been going up much, there is a lot more insecurity. Judis: Isn’t Germany doing well? Teixeira:. Germany is doing relatively well, but it hasn’t been a period of expansive growth for them either. There is a lot of wage stagnation and compression there. I **never meant to imply** that you can **perfectly predict social reform from economic outcomes**. But I think it **provides an important lens** on when the left does well and when the left does poorly. By and large when you look at Europe, you see the ~~straitjacket~~ [**dilemma**] that the Eurozone has created in the economies. People are **fearful**, they are **pessimistic**, they are **passive**. This is **very bad for the left**. Until you **break out** of that [dilemma] ~~straitjacket~~, the left is **not going to be able to do that well**, and the right is **going to continue to do relatively well** compared to them, and you’ll see the **continued rise in populism** because people have no faith in the system. So what I am trying to do is to get the left to focus on **getting to a new stage of capitalist growth** and **being able actually to deliver rising incomes**. There is No Alternative to the Left Judis: So let’s talk about how this political change will come about. What I took from your book is that we are currently suffering from secular stagnation, and that to get to a new stage of growth, we will have to implement the kind of left program that you describe. I worry that this argument contains a contradiction. On the one hand, the left can’t get its program enacted as long as times are bad. On the other hand, the only way to get out of bad times is for the left to get its program enacted. Teixeira: I see what you are asking. I think it is going to be **two steps forward**, **one step back**. We are sort of **slouching** toward the next stage of capitalism. I **don’t think it’s going to be pretty**. Political and economic factors are going to propel us in that direction. Ultimately, people want things to work better, they want their problems to be solved. And the **only way** we are going to get there is along the road I have described. I think this **equitable growth** approach that the Democrats united around is the future. The level of growth is going to vary over time, but I think the Democrats are the ones who are going to put us there and I think they are going to be rewarded for it. Judis:. But how does that happen? Isn’t there a crisis scenario implicit in your account? At some time, the current Third Way or neoliberal approach results in another Great Recession and at that point people will buy into a left-wing approach, the left-wing approach will create prosperity and at that time we will have an enduring left-wing or Democratic majority. Isn’t a step like this missing from your argument? Teixeira:. That certainly could be the way it goes down, but it’s **not clear we are required to have a recession** on the level we did in 2007 and 2008, or whether this sort of rolling crisis we have combined with other political events might do it. I don’t know, it’s hard to predict, but I think the great economist Herbert Stein said, if something cannot go on forever, it will stop. Judis: The great socialist Rosa Luxembourg said the choice was socialism or barbarism. I am not saying we are heading toward barbarism, but I think there is a determinism in your argument. I think you are saying that people will eventually choose a politics that will best help them. Reason will prevail. And I am not sure if that holds up historically. When you talk about the EU, you say eventually they will consolidate into a fiscal monetary union. I am not sure that is going to happen. It’s also possible that the Eurozone could break up and that there could be a lot of chaos. We have periods in history where things don’t happen in the best of all possible ways. Teixeira: The trajectory is **ultimately going to take us** to a **different** and **better place**. I think **eventually we will adapt** and we will **get something better** than we have because it is the **only solution to the ongoing problems**. **There is no alternative**. Judis: Countries are sometime structurally unable to do what is in their best interest. In the U.S., we have this strong anti-statist tradition going back to the revolution that seems to get in the way every time we want to do something like what you are proposing. It is possible that contrary to Hegel, the rational won’t turn out to be the real. Teixeira: Of course it is possible, but if you look at the history of the United States, **despite the anti-statist bias** and **despite all the other political problems**, the way the country has evolved over time is toward a **larger government** that **does more** and **provides more for people**. And we **obviously have evolved tremendously** in the social realm as well. Governments don’t do what is rational in the short term, at least rational in the sense you are describing it, but political systems **evolve over time** in a way that is consistent with the values and priorities of the left, and I expect that to continue over time. The 2016 Election Judis: Let’s talk about the 2016 election. Why did Clinton lose to such a weak opponent? Teixeira: The Democrats have an evolving majority that consists of groups like minorities, professionals, young people, single women and what have you, and that’s a true fact. It’s growing over time and it will continue to grow, but it was always mathematically true that if you take the declining group, the white non-college voters, and they move sufficiently in the direction of the other party, that will be enough to undermine your coalition. You won’t win. That’s exactly what happened in 2016. These voters moved rapidly away from the Democrats both in local and state races and in the presidential election. Judis: Why did they move? Teixeira: They do not have any faith that the Democrats share their values and are going to deliver a better life for them and their kids, and I think Hillary Clinton was a very efficient bearer of that meme. Whether she wanted to or not, the message she sent to these voters is that you are really not that important and I don’t take your problems seriously, and frankly I don’t have much to offer you. And that’s despite the fact that her economic program and policies would have actually been very good for these people. There was a study of campaign advertising in 2016 that showed Hillary outspent Trump significantly and that almost none of her advertising was about what she would actually do. Almost all of it was about how he was a bad dude. Voters were **fed up with stagnation** and with the Democrats and they **turned to someone who thought could blow up the system**. The way the Democrats and the left could **mitigate that problem** is to show these voters that they **take their problems seriously** and have their interests in mind, and could improve their lives. I **don’t think there is any way of doing that** without a **new model of economic growth**.

### AT: Water Shortages

#### 1 – No water shortages – geography and adaptation

**Ball 10**(Tim Ball writes for the Canada press “There Is No Water Shortage” 11/5/2010 http://archive.lewrockwell.com/spl2/there-is-no-water-shortage.html accessed 7/10/14)

**There is no shortage of water**. Amounts available vary regionally and change over time as precipitation amounts vary. Demand also changes with increases in population and economic development. Crude estimates indicate water use per person is 15 liters in undeveloped countries and approximately 900 liters in developed countries. **Throughout history humans have developed remarkable techniques and technologies to deal with these issues.** Few of these attempted to reduce demand, most worked to increase supply.¶ Some societies went to great lengths. The extent of the Roman Empire is delineated by the construction of aqueducts and lead mines developed to produce pipes to carry their water.¶ Major advances, considered important turning points in human development, are technological controls over weather. **Fire, housing and clothing created microclimates and the ability to live in more extreme conditions.** Irrigation was first introduced in the Fertile Crescent (Figure1) driven by a climate change. A region that produced crops gradually became drier with the onset of a warm period called the Holocene Optimum. Besides the decrease in precipitation there is, at least initially, an increase in variability.

#### 2 – They have to win timeframe to even come close to any of our impacts – make them point out a specific scenario

### AT: Deforestation

#### Economic growth causes reforestation— more efficient farms and reforestations initiatives—that solves carbon in the atmosphere.

**Shellenberger 19** (Michael, Time Magazine “Hero of the Environment” and Green Book Award Winner. He is also a frequent contributor to The New York Times, Washington Post, Wall Street Journal, Scientific American, and other publications. His TED talks have been viewed over three million times, “Forget The Amazon Hype, Fires Globally Have Declined 25% Since 2003 Thanks To Economic Growth” Forbes, August 30, <https://www.forbes.com/sites/michaelshellenberger/2019/08/30/forget-the-hype-forest-fires-have-declined-25-since-2003-thanks-to-economic-growth/#28e392ff163d>, Accessed 9/7/19, EB)

In reality, there was a whopping **25 percent decrease in the area burned** from 2003 to 2019, according to NASA. Between 2003 and 2015, the area burned in Africa declined by an area the size of Texas (700,000 square kilometers or 270,000 square miles. And against the picture painted by celebrities and the mainstream media that fires around the world are caused by economic growth, the truth is the opposite: **the amount of land being burned is declining thanks to development**, including urbanization. That's because the amount of land being converted into ranches and farms has been going down, not up, and because more of it is being done with machines than with fire. For the last 35 years, **the world has been re-foresting, meaning new tree growth has exceeded deforestation**. The area of the Earth covered with forest has increased by an area the size of Texas and Alaska combined. Less land is being converted into agriculture globally in part because **farmers are growing more food on less land.** Much of the re-forestation is occurring in deserts and tundra that had been barren, thanks to human-led reforestation initiatives, such as in China and Africa, and because of global warming. Warmer temperatures are what have allowed forests to grow in tundra. Mainstream journalists botched this story. They should have known about the decline in burning since scientists published a major study in Science in 2015. NASA promoted the Science article and wrote an update confirming a continuation of the decline in fires on August 20, 2019. And yet mainstream journalists have continued to push the apocalyptic framing in their coverage of fires in Amazon and Africa and attempted to link them to climate change. Consider how The New York Times misrepresented global fires earlier this week. "Their increase in severity and spread to places where fires were rarely previously seen is raising fears that climate change is exacerbating the danger," wrote Kendra Pierre-Louis. But this is wrong. In truth, the climate-fire nexus brings good news: **the decline in area burned has offset much of the risk of increased fire from global warming,** according to Doug Morton, co-author of the 2015 Science study and a forest scientist at NASA's Goddard Institute. “**When land use intensifies on savannas, fire is used less and less as a tool**,” said Niels Andela of NASA’s Goddard Space Flight Center. “As soon as people invest in houses, crops, and livestock, **they don’t want these fires close by anymore. The way of doing agriculture changes, the practices change, and fire disappears from the grassland landscape.”** “Climate change has increased fire risk in many regions, but satellite burned area data show that **human activity has effectively counterbalanced that climate risk**, especially across the global tropics,” Morton said. “We’ve seen a substantial global decline over the satellite record, and the loss of fire has some really important implications for the Earth system.” "**Regions with less fire saw a decrease in carbon monoxide emissions and an improvement in air quality during fire season**," notes NASA. "**With less fire, savanna vegetation is increasing—taking up more carbon dioxide from the atmosphere."** But you wouldn't know it from the apocalyptic pronouncements of the New York Times, CNN, Leonardo DiCaprio, Rep., Alexandria Ocasio-Cortez, Madonna, Senator Bernie Sanders, French President Emmanuel Macron, Senator Kamala Harris who still spread and have not deleted their wrong photos and information they have spread about the Amazon. The New York Times' Kendra Pierre-Louis even repeats the "lungs of the world" myth in her August 28 story. Celebrities and the mainstream news media have advanced an apocalyptic narrative of fires in places like the Amazon as violent intrusions on nature. This picture is false. “Fire had been instrumental for millennia in maintaining healthy savannas, keeping shrubs and trees at bay and eliminating dead vegetation,” says the senior author of a major Science paper about the decline of fires, Jim Randerson of the University of California, Irvine. In truth, the decline in burning raises new challenges. “For fire-dependent ecosystems like savannas,” Morton said, “the challenge is to balance the need for frequent burning to maintain habitat for large mammals and to maintain biodiversity while protecting people’s property, air quality, and agriculture.” As for the myth that the Amazon is the "lungs of the Earth" providing "20% of the world's oxygen," it appears to have been invented by a Malthusian Cornell University scientist in 1966, according to the George Mason University environmental philosopher, Mark Sagoff. "In the 1960s, when 'lungs of the earth' was the big reason to save the rain forest," Sagoff told me yesterday, "I got interested in it as a scientific question. I found no evidence that any tropical rainforest contributes to the net oxygen budget of the world." Sagoff sent me a 1966 an article by Cornell University scientist LaMont C. Cole in the journal BioScience. In it, Cole claimed that, as a result of burning fossil fuels, "the oxygen content of the atmosphere must start to decrease." That claim was incorrect and debunked as early as 1970 by climatologist Wallace S. Broecker writing for Science in June 1970. "In almost all grocery lists of man's environmental problems is found an item regarding oxygen supply," wrote Broeker. "Fortunately for mankind, the supply is not vanishing as some have predicted."

### AT: Peak Phosphorus

#### Peak phosphorus is wrong.

Bailey ’18 [Ronald; February 18; Science correspondent for Reason and the author of the books The End of Doom: Environmental Renewal in the Twenty-first Century (July 2015) and Liberation Biology: The Moral and Scientific Case for the Biotech Revolution (Prometheus, 2005). His work was featured in The Best American Science and Nature Writing 2004; *Reason,* “Is Degrowth the Only Way to Save the World?” <https://reason.com/2018/02/16/is-degrowth-the-only-way-to-save-the-wor/>; KS]

Are we about to run out of phosphorous to fertilize our crops? Peak phosphorus is not at hand. The U.S. Geological Survey (USGS) reports that at current rates of mining, the world's known reserves will last 266 years. The estimated total resources of phosphate rock would last over 1,140 years. "There are no imminent shortages of phosphate rock," notes the USGS. With respect to the deleterious effects that using phosphorus to fertilize crops might have outside of farm fields, researchers are working on ways to endow crops with traits that enable them to use less while maintaining yields.

#### Causes extinction – The war causes climate change and famine. Counter-forcing is impossible,

Starr 14 (Steven Starr, the Senior Scientist for Physicians for Social Responsibility and Director of the Clinical Laboratory Science Program at the University of Missouri. Starr has published in the Bulletin of the Atomic Scientists and the Strategic Arms Reduction (STAR) website of the Moscow Institute of Physics and Technology, June 11th, 2014, “There Can be No Winners in a Nuclear War,” Truth Out, <https://truthout.org/articles/there-can-be-no-winners-in-a-nuclear-war/> )

Nuclear war has no winner. Beginning in 2006, several of the world’s leading climatologists (at Rutgers, UCLA, John Hopkins University, and the University of Colorado-Boulder) published a series of studies that evaluated the long-term environmental consequences of a nuclear war, including baseline scenarios fought with merely 1% of the explosive power in the US and/or Russian launch-ready nuclear arsenals. They concluded that the consequences of *even a “small” nuclear war would include catastrophic disruptions of global climate* and massive destruction of Earth’s protective ozone layer. These and more recent studies predict that global agriculture would be so negatively affected by such a war, a global famine would result, which would cause up to 2 billion people to starve to death. These peer-reviewed studies – which were analyzed by the best scientists in the world and found to be without error – also predict that a war fought with less than half of US or Russian strategic nuclear weapons would destroy the human race. In other words, a US-Russian nuclear war would create such extreme long-term damage to the global environment that it would leave the Earth uninhabitable for humans and most animal forms of life. A recent article in the Bulletin of the Atomic Scientists, “Self-assured destruction: The climate impacts of nuclear war,” begins by stating: “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.” In 2009, I wrote “Catastrophic Climatic Consequences of Nuclear Conflicts” for the International Commission on Nuclear Non-proliferation and Disarmament. The article summarizes the findings of these studies. It explains that nuclear firestorms would produce millions of tons of smoke, which would rise above cloud level and form a global stratospheric smoke layer that would rapidly encircle the Earth. The smoke layer would remain for at least a decade, and it would act to destroy the protective ozone layer (vastly increasing the UV-B reaching Earth) as well as block warming sunlight, thus creating Ice Age weather conditions that would last 10 years or longer. Following a US-Russian nuclear war, temperatures in the central US and Eurasia would fall below freezing every day for one to three years; the intense cold would completely eliminate growing seasons for a decade or longer. No crops could be grown, leading to a famine that would kill most humans and large animal populations. *E*lectro*m*agnetic *p*ulse from high-altitude nuclear detonations would destroy the integrated circuits in all modern electronic devices, including those in commercial nuclear power plants. Every nuclear reactor would almost *instantly meltdown*; every nuclear spent fuel pool (which contain many times more radioactivity than found in the reactors) would boil off, releasing vast amounts of long-lived radioactivity. The fallout would make most of the US and Europe *uninhabitable*. Of course, the survivors of the nuclear war would be starving to death anyway. Once nuclear weapons were introduced into a US-Russian conflict, there would be little chance that a nuclear holocaust could be avoided. Theories of “limited nuclear war” and “nuclear de-escalation” are unrealistic. In 2002 the Bush administration modified US strategic doctrine from a retaliatory role to permit preemptive nuclear attack; in 2010, the Obama administration made only incremental and miniscule changes to this doctrine, leaving it essentially unchanged. Furthermore, Counterforce doctrine – used by both the US and Russian military – emphasizes the need for preemptive strikes once nuclear war begins. Both sides would be under immense pressure to launch a preemptive nuclear first-strike once military hostilities had commenced, especially if nuclear weapons had already been used on the battlefield. Both the US and Russia each have 400 to 500 launch-ready ballistic missiles armed with a total of at least 1800 strategic nuclear warheads, which can be launched with only a few minutes warning. Both the US and Russian Presidents are accompanied 24/7 by military officers carrying a “nuclear briefcase,” which allows them to transmit the permission order to launch in a matter of seconds. Yet top political leaders and policymakers of both the US and Russia seem to be unaware that their launch-ready nuclear weapons represent a self-destruct mechanism for the human race. For example, in 2010, I was able to publicly question the chief negotiators of the New START treaty, Russian Ambassador Anatoly Antonov and (then) US Assistant Secretary of State Rose Gottemoeller, during their joint briefing at the UN (during the Non-Proliferation Treaty Review Conference). I asked them if they were familiar with the recent peer-reviewed studies that predicted the detonation of less than 1% of the explosive power contained in the operational and deployed US and Russian nuclear forces would cause catastrophic changes in the global climate, and that a nuclear war fought with their strategic nuclear weapons would kill most people on Earth. They both answered “no.” More recently, on April 20, 2014, I asked the same question and received the same answer from the US officials sent to brief representatives of the NGOS at the Non-Proliferation Treaty Preparatory Committee meeting at the UN. None of the US officials at the briefing were aware of the studies. Those present included top officials of the National Security Council. It is frightening that President Obama and his administration appear unaware that the world’s leading scientists have for years predicted that a nuclear war fought with the US and/or Russian strategic nuclear arsenal means the end of human history. Do they not know of the existential threat these arsenals pose to the human race . . . or do they choose to remain silent because this fact doesn’t fit into their official narratives? We hear only about terrorist threats that could destroy a city with an atomic bomb, while the threat of human extinction from nuclear war is never mentioned – even when the US and Russia are each running huge nuclear war games in preparation for a US-Russian war. Even more frightening is the fact that the neocons running US foreign policy believe that the US has “nuclear primacy” over Russia; that is, the US could successfully launch a nuclear sneak attack against Russian (and Chinese) nuclear forces and completely destroy them. This theory was articulated in 2006 in “The Rise of U.S. Nuclear Primacy,” which was published in Foreign Affairs by the Council on Foreign Relations. By concluding that the Russians and Chinese would be unable to retaliate, or if some small part of their forces remained, would not risk a second US attack by retaliating, the article invites nuclear war. Colonel Valery Yarynich (who was in charge of security of the Soviet/Russian nuclear command and control systems for 7 years) asked me to help him write a rebuttal, which was titled “*Nuclear Primacy is a Fallacy*.” Colonel Yarynich, who was on the Soviet General Staff and did war planning for the USSR, concluded that the “Primacy” article used faulty methodology and erroneous assumptions, thus invalidating its conclusions. My contribution lay in my knowledge of the recently published (in 2006) studies, which predicted *even a “successful” nuclear first-strike*, which destroyed 100% of the opposing side’s nuclear weapons, would cause the citizens of the side that “won” the nuclear war to *perish from nuclear famine*, just as would the rest of humanity.

#### More ev

Julian Adorney 13, economic historian, entrepreneur, and contributor for the Ludwig von Mises Institute. He’s citing Professor McDonald who teaches courses on international relations theory, international political economy, and international security at University of Texas at Austin. (, Foundation for Economic Education, “Want Peace? Promote Free Trade”, 10/15, [http://www.fee.org/the\_freeman/detail/want-peace-promote-free-trade](about:blank)

Frédéric Bastiat famously claimed that “if goods don’t cross borders, soldiers will." Bastiat argued that free trade between countries could reduce international conflict because trade forges connections between nations and gives each country an incentive to avoid war with its trading partners. If every nation were an economic island, the lack of positive interaction created by trade could leave more room for conflict. Two hundred years after Bastiat, libertarians take this idea as gospel. Unfortunately, not everyone does. But as recent research shows, the historical evidence confirms Bastiat’s famous claim. To Trade or to Raid In “Peace through Trade or Free Trade?” professor Patrick J. McDonald, from the University of Texas at Austin, empirically tested whether greater levels of protectionism in a country (tariffs, quotas, etc.) would increase the probability of international conflict in that nation. He used a tool called dyads to analyze every country’s international relations from 1960 until 2000. A dyad is the interaction between one country and another country: German and French relations would be one dyad, German and Russian relations would be a second, French and Australian relations would be a third. He further broke this down into dyad-years; the relations between Germany and France in 1965 would be one dyad-year, the relations between France and Australia in 1973 would be a second, and so on. Using these dyad-years, McDonald analyzed the behavior of every country in the world for the past 40 years. His analysis showed a negative correlation between free trade and conflict: The more freely a country trades, the fewer wars it engages in. Countries that engage in free trade are less likely to invade and less likely to be invaded. The Causal Arrow Of course, this finding might be a matter of confusing correlation for causation. Maybe countries engaging in free trade fight less often for some other reason, like the fact that they tend also to be more democratic. Democratic countries make war less often than empires do. But McDonald controls for these variables. Controlling for a state’s political structure is important, because democracies and republics tend to fight less than authoritarian regimes. McDonald also controlled for a country’s economic growth, because countries in a recession are more likely to go to war than those in a boom, often in order to distract their people from their economic woes. McDonald even controlled for factors like geographic proximity: It’s easier for Germany and France to fight each other than it is for the United States and China, because troops in the former group only have to cross a shared border. The takeaway from McDonald’s analysis is that protectionism can actually lead to conflict. McDonald found that a country in the bottom 10 percent for protectionism (meaning it is less protectionist than 90 percent of other countries) is 70 percent less likely to engage in a new conflict (either as invader or as target) than one in the top 10 percent for protectionism. Protectionism and War Why does protectionism lead to conflict, and why does free trade help to prevent it? The answers, though well-known to classical liberals, are worth mentioning. First, trade creates international goodwill. If Chinese and American businessmen trade on a regular basis, both sides benefit. And mutual benefit disposes people to look for the good in each other. Exchange of goods also promotes an exchange of cultures. For decades, Americans saw China as a mysterious country with strange, even hostile values. But in the 21st century, trade between our nations has increased markedly, and both countries know each other a little better now. iPod-wielding Chinese teenagers are like American teenagers, for example. They’re not terribly mysterious. Likewise, the Chinese understand democracy and American consumerism more than they once did. The countries may not find overlap in all of each other’s values, but trade has helped us to at least understand each other. Trade helps to humanize the people that you trade with. And it’s tougher to want to go to war with your human trading partners than with a country you see only as lines on a map. Second, trade gives nations an economic incentive to avoid war. If Nation X sells its best steel to Nation Y, and its businessmen reap plenty of profits in exchange, then businessmen on both sides are going to oppose war. This was actually the case with Germany and France right before World War I. Germany sold steel to France, and German businessmen were firmly opposed to war. They only grudgingly came to support it when German ministers told them that the war would only last a few short months. German steel had a strong incentive to oppose war, and if the situation had progressed a little differently—or if the German government had been a little more realistic about the timeline of the war—that incentive might have kept Germany out of World War I. Third, protectionism promotes hostility. This is why free trade, not just aggregate trade (which could be accompanied by high tariffs and quotas), leads to peace. If the United States imposes a tariff on Japanese automobiles, that tariff hurts Japanese businesses. It creates hostility in Japan toward the United States. Japan might even retaliate with a tariff on U.S. steel, hurting U.S. steel makers and angering our government, which would retaliate with another tariff. Both countries now have an excuse to leverage nationalist feelings to gain support at home; that makes outright war with the other country an easier sell, should it come to that. In socioeconomic academic circles, this is called the Richardson process of reciprocal and increasing hostilities; the United States harms Japan, which retaliates, causing the United States to retaliate again. History shows that the Richardson process can easily be applied to protectionism. For instance, in the 1930s, industrialized nations raised tariffs and trade barriers; countries eschewed multilateralism and turned inward. These decisions led to rising hostilities, which helped set World War II in motion. These factors help explain why free trade leads to peace, and protectionism leads to more conflict. Free Trade and Peace One final note: McDonald’s analysis shows that taking a country from the top 10 percent for protectionism to the bottom 10 percent will reduce the probability of future conflict by 70 percent. He performed the same analysis for the democracy of a country and showed that taking a country from the top 10 percent (very democratic) to the bottom 10 percent (not democratic) would only reduce conflict by 30 percent. Democracy is a well-documented deterrent: The more democratic a country becomes, the less likely it is to resort to international conflict. But reducing protectionism, according to McDonald, is more than twice as effective at reducing conflict than becoming more democratic. Here in the United States, we talk a lot about spreading democracy. We invaded Iraq partly to “spread democracy.” A New York Times op-ed by Professor Dov Ronen of Harvard University claimed that “the United States has been waging an ideological campaign to spread democracy around the world” since 1989. One of the justifications for our international crusade is to make the world a safer place. Perhaps we should spend a little more time spreading free trade instead. That might really lead to a more peaceful world.

#### Rockets don’t melt the ozone---best studies

DoT 17 [Department of Transportation, studies analyzed by various environmental specialists including Daniel Czelusniak, “Adoption of the Environmental Assessment and Finding of No Significant Impact for Boost-back and Landing of Falcon Heavy Boosters at Landing Zone-1, Cape Canaveral Air Force Station, Florida,” 2017, https://www.faa.gov/about/office\_org/headquarters\_offices/ast/environmental/nepa\_docs/review/launch/media/FAA\_FONSI\_for\_Falcon\_Heavy\_RTLS\_at\_LZ-1.pdf]

The U.S. Air Force (USAF) acted as the lead agency, and the Federal Aviation Administration (FAA) was a cooperating agency, in the preparation of the February 2017 Supplemental Environmental Assessment to the December 2014 EA for Space Exploration Technologies Vertical Landing of the Falcon Vehicle and Construction at Launch Complex 13 at Cape Canaveral Air Force Station, Florida (2017 SEA), which analyzed the potential environmental impacts of Space Exploration Technologies Corp. (SpaceX) conducting boost-backs and landings of up to three Falcon Heavy boosters at Landing Zone 1 (LZ-1) at Cape Canaveral Air Force Station (CCAFS), Florida during the same mission. LZ-1 is also known as Launch Complex 13 (LC-13). The scope of the action analyzed in the 2017 SEA also included the option of landing one or two Falcon Heavy boosters on SpaceX’s autonomous droneship in the Atlantic Ocean. The 2017 SEA also addressed construction of two landing pads as well as construction and operation of a processing and testing facility for SpaceX’s Dragon spacecraft. The National Aeronautics and Space Administration (NASA) also participated as a cooperating agency in the preparation of the 2017 SEA. The 2017 SEA was prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA; 42 United States Code [U.S.C.] § 4321 et seq.); Council on Environmental Quality NEPA implementing regulations (40 Code of Federal Regulations [CFR] parts 1500 to 1508); the USAF’s Environmental Impact Analysis Process (32 CFR 989); and FAA Order 1050.1F, Environmental Impacts: Policies and Procedures. 2 In October 2014, the USAF issued the Environmental Assessment for the Space Exploration Technologies Vertical Landing of the Falcon Vehicle and Construction at Launch Complex 13 at Cape Canaveral Air Force Station, Florida (2014 EA), which analyzed the potential environmental impacts of SpaceX conducting boost-backs and landings of a Falcon 9 launch vehicle first stage/booster (or a single Falcon Heavy booster) at LZ-1 or in the Atlantic Ocean. Boost-backs are when the launch vehicle operator (i.e., SpaceX) command the first stage/booster to return to Earth after separating from the second stage and land in the ocean or on land. The 2014 EA also addressed related land clearing and construction of a main landing pad, four contingency landing pads, and supporting infrastructure at LZ-1. Since publication of the 2014 EA, SpaceX has constructed the main landing pad and none of the contingency landing pads. SpaceX no longer has plans to construct the four contingency landing pads discussed in the 2014 EA. SpaceX is now proposing to construct two additional main landing pads and the Dragon processing and testing facility. Launches (takeoffs) of the Falcon Heavy launch vehicle would occur from LC-39A located at Kennedy Space Center (KSC). Launch operations, including Falcon Heavy launches, at LC-39A were assessed in NASA’s 2013 Environmental Assessment for Multi-Use of Launch Complexes 39A and 39B, John F. Kennedy Space Center, FL. The FAA was a cooperating agency in the preparation of NASA’s EA. NASA and the FAA issued Findings of No Significant Impact (FONSIs) for launch operations at LC-39A. Thus, the scope of launch operations analyzed in the 2017 SEA was limited to the return and landing of the Falcon Heavy boosters at LZ-1. The 2017 SEA assumes a normal launch mission of a Falcon Heavy launch vehicle continues forward with the successful separation of the second stage and payload, while the boosters (i.e., the two side boosters and core booster) begin their boost-back and landing sequence for landing at LZ-1. As the Proposed Action would require Federal actions (as defined in 40 CFR § 1508.18) involving the USAF and FAA, the EA was prepared to satisfy the NEPA obligations of both agencies. The FAA’s Federal action in this matter pertains to its role in issuing licenses for the operation of commercial launch and reentry vehicles at launch sites. The USAF’s action is issuing a five-year real property license to SpaceX to allow SpaceX to operate LZ-1 as a landing facility. The USAF issued a FONSI on March 13, 2017, which stated the potential environmental impacts associated with the Proposed Action would not individually or cumulatively result in a significant impact on the quality of the human environment, and therefore, the preparation of an environmental impact statement (EIS) was not required. 3 SpaceX is required to obtain a license from the FAA for Falcon Heavy launch operations, to include boost-backs and landings. Based on its independent review and consideration of the 2017 SEA, the FAA issues this FONSI concurring with, and formally adopting, the analysis of impacts and findings in the 2017 SEA, supporting the FAA’s issuance of licenses to SpaceX for Falcon Heavy launch operations to include boost-backs and landings at LZ-1 or on a droneship in the Atlantic Ocean. If, in their license application to the FAA, SpaceX makes changes to their operations which fall outside the scope of the 2017 SEA, additional environmental review would be required prior to the FAA issuing a license associated with such an application. After reviewing and analyzing available data and information on existing conditions and potential impacts, including the 2017 SEA, the FAA has determined the issuance of licenses to SpaceX to conduct Falcon Heavy boost-backs and landings at LZ-1 or in the Atlantic Ocean would not significantly affect the quality of the human environment within the meaning of NEPA. Therefore, the preparation of an EIS is not required, and the FAA is independently issuing this FONSI. The FAA has made this determination in accordance with applicable environmental laws and FAA orders and regulations. The 2017 SEA is incorporated by reference into this FONSI.

#### Fourth wave of science solves

**Kaku 18** [Michio, an American theoretical physicist, futurist, and popularizer of science. He is a professor of theoretical physics in the City College of New York and CUNY Graduate Center. “There's Only One Way For Humanity to Survive. Go To Mars.,” <https://news.nationalgeographic.com/2018/02/there-s-only-one-way-for-humanity-to-survive--go-to-mars-/>]

You use the phrase “the fourth wave of science.” Explain what this means and how it could one day make it possible to terraform Mars. We’ve had three waves of scientific innovation. The first wave, the Industrial Revolution, gave us the steam engine, the locomotive, and factories. The second wave was electricity and magnetism, whereby we had TV, internal combustion cars, a beginning of the space program. The third revolution is high tech: computers, lasers, the Internet. Now we have the fourth wave of innovation: artificial intelligence, biotech, and nanotech. That’s going to change the way we view Mars. Many people say Mars is cold and desolate, and there’s nothing to grow there. We can genetically modify plants and algae to thrive in the Martian atmosphere. But who’s going to do the heavy lifting? We all would like to see futuristic cities on Mars, but robots are going to become much more adapted to working in these harsh environments by the end of this century, so we expect to see robotic construction workers building the fantastic domed cities you see in science fiction novels.

### Util card

#### Existential risks outweigh.

Farquhar et al. 17 – Sebastian Farquhar, Computer Science DPhil Student at the University of Oxford. John Halstead, Political Philosophy DPhil at the University of Oxford. Dr. Owen Cotton-Barratt, Pure Math DPhil at the University of Oxford. Dr. Stefan Schubert, Philosophy PhD at Lund University. Haydn Belfield, a BA. Andrew Snyder-Beattie, Philosophy PhD Student at the University of Oxford. [Existential Risk: Diplomacy and Governance, Global Priorities Project, 1-23-17, [https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf]//BPS](https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf%5d//BPS)

In this argument, it seems that Parfit is assuming that the survivors of a nuclear war that kills 99% of the population would eventually be able to recover civilisation without long-term effect. As we have seen, this may not be a safe assumption – but for the purposes of this thought experiment, the point stands. What makes existential catastrophes especially bad is that they would “destroy the future,” as another Oxford philosopher, Nick Bostrom, puts it.66 This future could potentially be extremely long and full of flourishing, and would therefore have extremely large value. In standard risk analysis, when working out how to respond to risk, we work out the expected value of risk reduction, by weighing the probability that an action will prevent an adverse event against the severity of the event. Because the value of preventing existential catastrophe is so vast, even a tiny probability of prevention has huge expected value.67

Of course, there is persisting reasonable disagreement about ethics and there are a number of ways one might resist this conclusion.68 Therefore, it would be unjustified to be overconfident in Parfit and Bostrom’s argument.

In some areas, government policy does give significant weight to future generations. For example, in assessing the risks of nuclear waste storage, governments have considered timeframes of thousands, hundreds of thousands, and even a million years.69 Justifications for this policy usually appeal to principles of *intergenerational equity* according to which future generations ought to get as much protection as current generations.70 Similarly, widely accepted norms of sustainable development require development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs.71

However, when it comes to existential risk, it would seem that we fail to live up to principles of intergenerational equity. Existential catastrophe would not only give future generations less than the current generations; it would give them *nothing*. Indeed, reducing existential risk plausibly has a quite low cost for us in comparison with the huge expected value it has for future generations. In spite of this, relatively little is done to reduce existential risk. Unless we give up on norms of intergenerational equity, they give us a strong case for significantly increasing our efforts to reduce existential risks.

1.3. WHY EXISTENTIAL RISKS MAY BE SYSTEMATICALLY UNDERINVESTED IN, AND THE ROLE OF THE INTERNATIONAL COMMUNITY

In spite of the importance of existential risk reduction, it probably receives less attention than is warranted. As a result, concerted international cooperation is required if we are to receive adequate protection from existential risks.

1.3.1. Why existential risks are likely to be underinvested in

There are several reasons why existential risk reduction is likely to be underinvested in. Firstly, it is *a global public good*. Economic theory predicts that such goods tend to be underprovided. The benefits of existential risk reduction are widely and indivisibly dispersed around the globe from the countries responsible for taking action. Consequently, a country which reduces existential risk gains only a small portion of the benefits but bears the full brunt of the costs. Countries thus have strong incentives to free ride, receiving the benefits of risk reduction without contributing. As a result, too few do what is in the common interest.

Secondly, as already suggested above, existential risk reduction is an *intergenerational* public good: most of the benefits are enjoyed by future generations who have no say in the political process. For these goods, the problem is *temporal* free riding: the current generation enjoys the benefits of inaction while future generations bear the costs.

Thirdly, many existential risks, such as machine superintelligence, engineered pandemics, and solar geoengineering, pose an unprecedented and uncertain future threat. Consequently, it is hard to develop a satisfactory governance regime for them: there are few existing governance instruments which can be applied to these risks, and it is unclear what shape new instruments should take. In this way, our position with regard to these emerging risks is comparable to the one we faced when nuclear weapons first became available.

Cognitive biases also lead people to underestimate existential risks. Since there have not been any catastrophes of this magnitude, these risks are not salient to politicians and the public.72 This is an example of the misapplication of the *availability heuristic*, a mental shortcut which assumes that something is important only if it can be readily recalled.

Another cognitive bias affecting perceptions of existential risk is scope neglect. In a seminal 1992 study, three groups were asked how much they would be willing to pay to save 2,000, 20,000 or 200,000 birds from drowning in uncovered oil ponds. The groups answered $80, $78, and $88, respectively.73 In this case, the size of the benefits had little effect on the scale of the preferred response. People become numbed to the effect of saving lives when the numbers get too large. 74 Scope neglect is a particularly acute problem for existential risk because the numbers at stake are so large. Due to scope neglect, decision-makers are prone to treat existential risks in a similar way to problems which are less severe by many orders of magnitude. A wide range of other cognitive biases are likely to affect the evaluation of existential risks.75