### 1NC—K

#### Expenditure without limit is a fantasy premised on the exploitation of women. Their naturalistic, erotic model of consumption cannot be separated from bataille’s gendered anthropological understanding of history.

Joy, PhD, 99

(Morny, ReligiousStudies@Calgary, Beyond the Given and the All-giving: Reflections on Women and the Gift *Australian Feminist Studies* 14 (30) p. 322-324)

There is, however, another fascinating elaboration of women’s situation that was prompted by Mauss’s reflections on the gift. This arises from the fact that quite a number of readers have detected an ambivalent agenda in Mauss’s account between the system of economic and social checks and balances that governs the gift, and a moral impulse, already alluded to, of a purely disinterested offering that is displayed free of any qualifications. It is this extravagant gesture that has been embellished, particularly by Georges Bataille, who also read Mauss, to propose an alternative model of dispensation that in its unconstrained largesse is characteristic of women: ‘To give is the fundamental feminine attitude.’40 This unconditional abundance as *de´pense* (expenditure) was Bataille’s modification of Mauss’ seeming domestication of the profligate waste evident in Boas’ description of potlatch celebrations. Bataille was concerned that any emphasis on the value of objects of exchange vitiated the communicative momentum he felt was central to the process of reckless abandon. This process, documented by Mauss after Boas, did not reckon on individual or contractual reciprocity, but operated according to a communal ‘logic’ of immediate excessive consumption. In such a transgressive or general economy, it is not simply the civilised (i.e. bourgeois) hierarchical or utilitarian value of objects (though these are for him obvious interpretive distortions) that Bataille wishes primarily to counter. Instead, he wants to (re-)introduce a world view, untarnished by profane, rational calculations, where an economy of superabundance—be it in its rituals of sacrifice, in its squandering of riches, or in its dissolution of assets—witnesses to a sacred universe. This sacral reality has nothing to do with the orthodoxies of organised religion. For Bataille, religion, specifically Christianity, has eradicated the innate human propensity for sacrality by the imposition of categories which deny the superabundant energy that Bataille considers the essence of life. Doctrines such as salvation and original sin are the antithesis of transgression—which, according to Bataille, is an exorbitant expenditure, a cathartic expression of a natural surplus of energy that is endemic to every organism. Erotictism and the role of women are central motifs in Bataille’s exposition of transgression. As Michael Richardson depicts this relation: Eroticism serves the purposes of love; it is an explosion, a bursting of life, and it needs to be returned to its rightful place, which lies at the heart of the sacred. It represents both a mediation point between ourselves and the forces of nature and at the same time both differentiates as well as emphasizing our essential unity.41 The essential link, however, that conjoins eroticism and woman is one of sacrifice—a phenomenon which Bataille invested with the most intense release of both violence and dread, yet which affirmed the essential sacred nature of life. As Bataille asserts in his essay ‘Hegel, Death and Sacrifice’, It must be said too that sacrifice, like tragedy, was an element that of a celebration; it bespoke a blind, pernicious joy and all the danger of that joy, and yet this is precisely the principle of *human joy*; it wears out and threatens with death all who get caught up in its movement.42 The seeming paradox of death as the ultimate exaltation of life, is the vindication of *de´pense*, the ecstatic testimony, the defiant act *contra* all profane and homogenised religion. It is a gesture made in the name of that unfathomable and dangerous abyss that undermines all systems that ensure security. ‘It is the common business of sacrifice to bring life and death into harmony, to give death the upsurge of life, life the momentousness and the vertigo of death opening onto the unknown.’43 It is important to stress, however, that though there has been reference to Bataille wishing to undertake an actual human sacriflce under the auspices of the group *Ace´phale*,44 and though he has stated ‘Violence alone can burst the barriers of the rational world’,45 Bataille’s relation to sacrifice is one of allegiance to absract heterogeneous forces that sabotage the staid and sanctimonious, the acquisitive and anal accoutrements of regulated societies—especially of their economy and staid religious institutions. ‘Sacrifice is the antithesis of production, which is accomplished with a view to the future; it is consumption that is concerned only with the moment.’46 Yet though sacrifice is extolled, it would seem to have one major drawback, for, in the sacrificial act of sexuality, it is the woman who has the dubious honour of being the victim ***par excellence***: ‘The lover strips bare the beloved of her identity no less that the blood-stained priest his human or animal victim. The woman in the hands of her assailant is despoiled of her being.’47 It is perhaps important to stress that this abasement is, of course, for Bataille a position of honour, a positive dereliction for women insofar as she exemplifies the ultimate *offering—*annihilation of her self as the perfect token of communication. It must also be acknowledged that in this sublime sacrifice, the sacrificer also abandons her/himself. Both participants are ecstatic violaters of the limit. This inaugurates a Nietzschean moment—a joyous affirmation of life in death, achieved by risking everything in defying all conventions. But, none the less, there are certain problems of both appropriation and projection in the process of this operation. The woman involved seems to remain at the mercy of the desires of man. The male sacrificer declares: Intimately, I belong to the sovereign world of gods and myths, to the world of violent and uncalculated generosity, just as my wife belongs to my desires. I withdraw you, victim, from the world in which you were and could only be reduced to the condition of a thing having a meaning that was foreign to your intimate nature. I call you back to the intimacy of the divine world, of the profound *immanence* of all that is.48 Michele Richman illustrates the difficulty of this position when she reflects on the role of woman in the context of Bataille’s elaboration of Mauss’ *The Gift*. Generosity flows not just from the father who makes the gift of his daughter to the community; the real don is the gift a woman makes of herself. By turning to eroticism as the form of de´pense most accessible in contemporary society, Bataille focuses on what appears as the greater potential for erotic exuberance among women.49 She then continues, raising perhaps the most contentious item in Bataille’s approach: ‘The possible relation of their transgressive sexuality to the position ascribed them in the exchange system of patriarchal society is never explicitly considered.’50 Thus it is that Bataille’s idealised portrayal of women as beneficent, to the point of immolation, projects a fantasy that takes exploitation for granted. In another exposition, in his essay, ‘The Notion of Expenditure’ in *Visions of Excess* (1985), Bataille draws attention to the figure of the prostitute also as the representative of a mode of gratuitous expenditure. However, if there was ever a woman held in the subjection of forces beyond her control (both symbolic and material), no matter the extent of her exuberance or dedication to the moment, it is the figure of the whore. Transgressive though she may be, the economy of calculation for services rendered sustains, if not contributes directly to the maintenance of the capitalistic extortion Bataille wished to subvert. And perhaps for Bataille, as for Mauss and Le´vi-Strauss, the blindspot in the old dream of symmetry distorts not just men’s attempts to define the operations of a society, but their experiments that seek to express a divergent order. This occurs despite Bataille’s resistance to Le´vi-Strauss’ structuralist commodification of women even though he acknowledges Le´vi-Strauss’ accomplishment in discerning the relationship between the incest-taboo and the structures of kinship. Bataille himself becomes caught within that same binary mode that pervaded Le´vi-Strauss’ work—particularly that of the sacred and profane. This is evident especially when he glorifies (fetishises) women in what today seems a caricature of erotic excess which is inevitably self-destructive and masochistic. Thus, Bataille, in the same manner as Mauss and Le´vi-Strauss, mobilises the figure of women to conform with their own romantic projections. As is obvious, their observations on the gift have very little relation to the primary anthropological data—which has been distorted by the lens of Western cultural perspectives and models. Nor does it seem to relate to the lives of actual women. Yet it is this trajectory of the gift and its connection to women that still continues to exercise a fascination for many Western thinkers.

#### Sexism is a D-Rule—Bataille and his theories are hypermasculine for a laundry list of reasons and should be rejected all together.

Brintnall 15

(J.D., Northeastern University School of Law; M.A., Pacific School of Religion; Ph.D., Emory University, director of the Graduate Certificate Program in Gender, Sexuality & Women’s Studies, More Credentials: <https://clas-pages.uncc.edu/kent-brintnall/>), 8-3-15 , (Kent, Negative Ecstasies: Georges Bataille and the Study of Religion, 79)

To conclude, I would like to suggest that the example of Tantra in north-eastern India not only illustrates the ways in which Bataille’s work can be used to shed light on South Asian materials to critique and rethink certain aspects of Bataille. The best use of Bataille—or of any modern theoretical approach, I wouldfff argue – is not just a simplistic application of his work to other historical and cultural examples but rather a more critical dialogue in which both sides are transformed by the encounter. Perhaps the most significantly, the case of Assamese Tantra highlights an important tension and ambivalence in Bataille’s otherwise very useful insights into the dynamics of sexuality, violence, and trasnsgression. On the one hand, Bataille clearly emphasizes the radical, orgiastic nature of sexuality and transgression, the power of erotism to dissolve and shatter fixed individual identities. Yet on the other hand, as various feminist critics have observed, Bataille’s work is also largely focus on male and phallic sexuality, to the general exclusion of female, nonphallic eroticism. Not only does Bataille share with other French theorists such as Michel Foucault a certain “gender blindness” and a lack of attention to the ways in which male and female erotic experience is constructed differently in different historical and cultural contexts; more fundamentally, many critics have argued, he reflects a clear masculine bias and a general tendency to treat women as passive objects and victims. As Ladellle McWhorter observes, most feminists find Batialle “disturbing and, to varying degrees, anti-feminist if not misogynist. A cursory reading of almost any of his texts at any stage of his career gives ample reason for this assessment…. Bataille’s perspectives on the world was that of a heterosexual male, and all too often that perspective valorizes itself, seemingly to the exclusion of all others, so that Bataille begins to sound like a heterosexist masculine supremacist.”

### 1NC—CP

CP: **A just government ought to recognize an unconditional right of workers to strike except for**

#### Low Air Traffic Strikes now due to lack of Right to Strike – the plan reverses penalties.

Youn 19 Soo Youn 1-22-2019 "Why TSA and FAA workers can't just go on strike to end the shutdown" <https://abcnews.go.com/US/tsa-faa-workers-strike-end-shutdown/story?id=60540070> (Freelance Journalist)//Elmer

All over Twitter and Facebook, citizen commentators are offering a solution to end the partial U.S. government shutdown: **airport workers should just go on strike**. "How many hours after all the TSA workers went on strike would the government be re-opened?" tweeted consultant David Rothkopf, a sentiment echoed throughout the Twittersphere, calling on Transportation Security Administration workers and air traffic controllers to not show up for work. [Tweet Omitted] "The employees of the TSA can do even more. I propose a MASS sickout in Atlanta, the Monday after the Super Bowl. I'm not saying to disrupt the game...but make it impossible for those people to go back home. MAKE Congress and the President pay attention," radio host Joe Madison tweeted. The employees of the TSA can do even more. I propose a MASS sickout in Atlanta, the Monday after the Super Bowl. I'm not saying to disrupt the game...but make it impossible for those people to go back home. MAKE Congress and the President pay attention.https://t.co/N4nio3yudz — Joe Madison (@MadisonSiriusXM) January 22, 2019 But **striking is illegal for federal workers.** "Federal employees are **governed** chiefly **by** the **F**ederal **S**ervice **L**abor **M**anagement **R**elations **A**ct of 1978. That statute prohibits strikes by federal workers," University of Michigan law professor Kate Andrias told ABC News in an email. Moreover, the act **bars workers from getting a future federal government** job "if he or she 'participates in a strike, or asserts the right to strike against the Government of the United States," Andrias added, quoting the act. **For many air traffic controllers**, whose ranks are already at 30-year lows, **the last strike has been seared** into their memories. In **1981**, nearly **13,000 controllers walked out** after contract talks between their union, The Professional Air Traffic Controllers Organization (PATCO), and the Federal Aviation Administration broke down. Then-President Ronald **Reagan** **fired 11,000 controllers** within days and the **union was decertified**. Reagan also instituted **a lifetime ban** for working for the FAA for the striking controllers. While then-President Bill Clinton issued an executive order to modify the ban, "it's a short shelf-life profession," Georgetown University history professor Joseph A. McCartin told ABC News. There's also a mandatory retirement age of 56. "That's more than 13 years," McCartin, who wrote a book about the PATCO strike, explained. "Many were not interested in coming back." **Were they to strike** today, **federal workers could face prosecution and even jail time**. "While the clear majority of states make public-sector strikes illegal, the statute covering most federal employees **has some of the toughest penalties for illegal strikes**. Specifically, the statute covering most federal workers makes striking a crime, which is unusual," Joseph E. Slater, a law professor at the University of Toledo and an expert in public sector labor law, told ABC News in an email. "The typical penalties are (i) you can be fired and (ii) you and your union can be fined. But in addition to that, you can be jailed for striking against the federal government. And indeed, a number of the PATCO strikers were back in the early 1980s," Slater explained. The suggestion of a strike, or another way to walk off the job, is something Nick Daniels, president of the National Air Traffic Controller’s Association (NATCO) Fort Worth Center's chapter hears a lot. But as a union leader, he's well aware of the penalties.

#### Trade is rebounding now.

Wood 9-16 Laura Wood 9-16-2021 “Global Terminal Tractor Market (2021 to 2026) - Advancements in Terminal Tractors Presents Opportunities” <https://www.globenewswire.com/en/news-release/2021/09/16/2298189/28124/en/Global-Terminal-Tractor-Market-2021-to-2026-Advancements-in-Terminal-Tractors-Presents-Opportunities.html> (Senior Press Manager at Research and Markets)//Elmer

However, **a strong rebound in global trade** **with** the **recovery of major industries** across the globe since the middle of last year has **helped soften** the **impact of the pandemic** for trade. The **global economic recovery** is also **expected to be fueled by** the **higher production of vaccines** and vaccination rates, allowing businesses to reopen more quickly. According to World Trade Organization (WTO), the **volume** of world merchandise trade is **expected to increase by 8.0%** in 2021 after having fallen 5.3% in 2020, continuing its rebound from the pandemic-induced collapse that bottomed out in the second quarter of 2020.

#### Strong Airline Industry key to global trade and the economy – strikes obliterate these benefits.

PWC 16, Pricewaterhouse Coopers. "Economic impact of air traffic control strikes in Europe." (2016). (PricewaterhouseCoopers LLP)//Elmer

2.2.1 The importance of connectivity The International Civil Aviation Organization (ICAO) defines connectivity as an indicator of a network’s concentration and its ability to move passengers from their origin to their destination seamlessly22. **Air connectivity is key to economic growth**, in part because it **enables States to attract business investment and human capital**. An increase in air connectivity **also spurs tourism, which is vital to many countries’ economic prosperity**. There is a **range of evidence produced** by airline industry authorities and academics which **suggests** that **as aviation expands, productivity and hence GDP increases**.23 In 2013 PwC completed a **deep-dive analysis** into **how aviation connectivity** **contributes to** the UK’s economy. The study identified five channels through which aviation plays a “positive enabling role”: **trade** in services, trade in goods, tourism, **business investment and innovation**, and productivity. A key finding emerging from academic and industry studies is the **strong linkage that has been observed over the last 20 years between airline industry growth and GDP growth.** In addition, studies have found that **a 10 percent increase in business air usage, or air travel connectivity, leads to an increase in whole economy productivity of between 0.07 percent and 0.9 percent.24** This includes: x reducing air travel times, giving businesses greater efficiency of access to a wider marketplace; x facilitating oversight of far-flung operations and thereby helping control their risks; thus x enabling investment and human capital to flow more freely across borders and exploit comparative advantages. In particular, a 2006 Oxford Economics study highlights the statistical linkage between business air usage and the level of GDP – in technical terms the study found that business air usage and Total Factor Productivity have a robust co-integrating relationship. Their key result implies that, “other things equal, a 10% increase in business air usage could raise GDP by 0.6% in the long run”. The report also notes that the growth in air transport in the 10 years prior to 2006 “boosted long-run underlying productivity by 2.0% across the EU25.”25 Further evidence on the specific channels of impact of aviation on GDP is outlined in the literature review in Section 4.3 of this report. Air transport is an important enabler to achieving economic growth and development. **Air transport facilitates integration into the global economy** **and provides vital connectivity on a** national, regional, and **international scale**. World Bank In the context of this study, if an **air traffic control strike** **causes** a reduction in the ability for airlines to operate flights as scheduled, this reduces the number of passengers and shipments able to reach their desired destinations as planned. Both **cancelled and delayed flights** **obstruct trade and connectivity**. Furthermore, a **pattern of disruptions will create** **uncertainty and discourage businesses** and consumers **from activities** that require air travel, therefore **reducing trade and connectivity further**. Given the importance of the link between the whole economy productivity and the airline sector output, it is therefore crucial to incorporate this linkage directly into our economic modelling of the impact of ATC strikes.

#### Collapse of Trade causes Hotspot Escalation – goes Nuclear.

Kampf 20 David Kampf 6-16-2020 “How COVID-19 Could Increase the Risk of War” <https://www.worldpoliticsreview.com/articles/28843/how-covid-19-could-increase-the-risk-of-war> (Senior PhD Fellow at the Center for Strategic Studies at The Fletcher School)//Elmer

But that overlooked the ways in which the risk of interstate war was already rising before COVID-19 began to spread. Civil wars were becoming more numerous, lasting longer and attracting more outside involvement, with dangerous consequences for stability in many regions of the world. And the global dynamics most commonly cited to explain the falling incidence of interstate war—democracy, economic prosperity, international cooperation and others—were being upended. If the spread of democracy kept the peace, then its global decline is unnerving. **If globalization and** economic **interdependence kept** the **peace, then** a looming global depression and the **rise of** nationalism and **protectionism are disconcerting**. If regional and global institutions kept the peace, then their degradation is unsettling. If the balance of nuclear weapons kept the peace, then growing risks of proliferation are disquieting. And if America’s preeminent power kept the peace, then its relative decline is troubling. Now, the pandemic, or more specifically the world’s reaction to it, is revealing the extent to which the factors holding major wars in check are withering. The idea that war between nations is a relic of the past no longer seems so convincing. The Pessimists Strike Back More than any other individual, it was cognitive scientist Steven Pinker who popularized the idea that we are living in the most peaceful moment in human history. Starting with his 2011 bestseller, “The Better Angels of Our Nature: Why Violence Has Declined,” Pinker argued that the frequency, duration and lethality of wars between great powers have all decreased. In his 2019 book, “Enlightenment Now: The Case for Reason, Science, Humanism, and Progress,” he wrote that war “between the uniformed armies of two nation-states appears to be obsolescent. There have been no more than three in any year since 1945, none in most years since 1989, and none since the American-led invasion of Iraq in 2003.” Optimists like Pinker held that, rather than the world falling apart, as a quick glance at headline news might suggest, the opposite was true: Humanity was flourishing. More regions are characterized by peace; fewer mass killings are occurring; governance and the rule of law are improving; and people are richer, healthier, better educated and happier than ever before. In their book, “Clear and Present Safety: The World Has Never Been Better and Why That Matters to Americans,” Michael A. Cohen and Micah Zenko argued that the evidence is so overwhelming that it is difficult to argue against the idea that wars between great powers, and all other interstate wars, are becoming vanishingly rare. Even when wars do break out, they tend to be shorter and less deadly than they were in the past. John Mueller, a senior fellow at the Cato Institute, also reasoned that the idea of war, like slavery and dueling before it, was in terminal decline, while Joshua Goldstein, an international relations researcher at American University, credited the United Nations and the rise of peacekeeping operations for helping win the “war on war.” But in recent years, a range of critics have begun to poke holes in these arguments. Tanisha M. Fazal, an international relations professor at the University of Minnesota, contends that the decline in war is overstated. Major advances in medicine, speedier evacuations of wounded soldiers from the field of battle and better armor have made war less fatal—but not necessarily less frequent. Fazal and Paul Poast, who is at the University of Chicago, further assert that the notion of war between great powers as a thing of the past is based on the assumption that all such conflicts resemble World War I and II—both are historical anomalies—and overlooks the actual wars fought between great powers since 1945, from the Korean War and the Vietnam War to proxy wars from Afghanistan to Ukraine. Meanwhile, Bear F. Braumoeller, an Ohio State political science professor, analyzed the same historical data on conflicts used by Pinker, Mueller and Goldstein, and found no general downward trend in either the initiation or deadliness of warfare over the past two centuries. What’s more, Braumoeller contends that the so-called “long peace”—the 75 years that have passed without systemic war since World War II—is far from invulnerable, and that wars are just as likely to escalate now as they used to be. Just because a major interstate war hasn’t happened for a long time, doesn’t mean it never will again. In all probability, it will. And by focusing solely on interstate wars, the optimists miss half the story, at least. Wars between states have declined, but civil wars never disappeared—and these **internal conflicts** **could easily escalate into regional or global wars**. The number of conflicts in the world reached its highest point since World War II in 2016, with 53 state-based armed conflicts in 37 countries. All but two of these conflicts were considered civil wars. To make matters worse, new studies have shown that civil wars are becoming longer, deadlier and harder to conclusively end, and that these internal conflicts are not really internal. Civil wars harm the economies and stability of neighboring countries, since armed groups, refugees, illicit goods and diseases all spill over borders. Some 10 million refugees have fled to other countries since 2012. The countries that now host them are more likely to experience war, which means states with huge refugee populations like Lebanon, Jordan and Turkey face legitimate security challenges. Even after the threat of violence has diminished in refugees’ countries of origin, return migration can reignite conflicts, repeating the brutal cycle. A Yugoslav Federal Army tank. Perhaps most importantly, recent research indicates that civil wars increase the risk of interstate war, in large part because they are attracting more and more outside involvement. In a 2008 paper, researchers Kristian Skrede Gleditsch, Idean Salehyan and Kenneth Schultz explained that, in addition to the spillover effects, two other factors in civil wars increase international tensions and could possibly provoke wider interstate wars: external interventions in support of rebel groups and regime attacks on insurgents across international borders. Immediately after the Cold War, none of the ongoing civil wars around the world were internationalized. According to the Uppsala Conflict Data Program, there were 12 full-fledged civil wars in 1991—in Afghanistan, Iraq, Peru, Sri Lanka, Sudan, and elsewhere—and foreign militaries were not active on the ground in any of them. Last year, by contrast, every single full-fledged civil war involved external military participants. This is due, in part, to the huge growth in U.S. military interventions abroad into civil conflicts, but it’s not only the Americans. All of today’s major wars are in essence proxy wars, pitting external rivals against one another. Conflicts in Syria, Yemen and Libya are best understood not as civil wars, but as international warzones, attracting meddlers including the United States, Russia, Saudi Arabia, Turkey, Iran, France and many others, which often intervene not to build peace, but to resolve conflicts in a way that is favorable to their own interests. These internationalized wars are more lethal, harder to resolve and possibly more likely to recur than civil wars that remain localized. It is not that difficult to imagine how these conflicts could spark wider international conflagrations. Wars, after all, can quickly spiral out of control. As Risks Increase, Deterrents Decline To make matters worse, most of the global trends that explained why interstate war had decreased in recent decades are now reversing. The theories that democracy, prosperity, cooperation and other factors kept the peace have been much debated—but if there was any truth to them, their reversals are likely to increase the chance of war, irrespective of how long the coronavirus pandemic lasts. Democracy is often considered a prophylactic for war. Fully democratic countries are less likely to experience civil war and rarely, if ever, go to war with other democracies—though, of course, they do still go to war against non-democracies. While this would be great news if democracy and pluralism were spreading, there have now been 14 consecutive years of global democratic decline, and there have been signs of additional authoritarian power grabs in countries like Hungary and Serbia during the pandemic. If democracy backslides far enough, internal conflicts and foreign aggression will become more likely. Other theories posit that **economic bonds between countries** have **limited wars** in recent decades. Dale Copeland, a professor of international relations at the University of Virginia, has argued that **countries work to preserve ties when there are high expectations for future trade**, **but war becomes** increasingly **possible when trade is predicted to fall.** If **globalization brought peace**, the recent wave of far-right nationalism and populism around the world may increase the chances of war, as tariffs and other trade barriers go up—mostly from the United States under President Donald Trump, who has launched trade wars with allies and adversaries alike. The coronavirus pandemic immediately elicited further calls to reduce dependence on other countries, with Trump using the opportunity to pressure U.S. companies to reconfigure their supply chains away from China. For its part, China made sure that it had the homemade supplies it needed to fight the virus before exporting extras, while countries like France and Germany barred the export of face masks, even to friendly nations. And widening economic inequalities, a consequence of the pandemic, are not likely to enhance support for free trade. This assault on open trade and globalization is just one aspect of a decaying liberal international order, which, its proponents argue, has largely helped to preserve peace between nations since World War II. But that old order is almost gone, and in all likelihood isn’t coming back. The U.N. Security Council appears increasingly fragmented and dysfunctional. Even before Trump, the world’s most powerful country ratified fewer treaties per year under the Obama administration than at any time since 1945. Trump’s presidency only harms multilateral cooperation further. He has backed out of the Paris Agreement on climate change, reneged on the Iran nuclear deal, picked fights with allies, questioned the value of NATO and defunded the World Health Organization in the middle of a global health crisis. Hyper-nationalism, rather than international collaboration, was the default response to the coronavirus outbreak in the U.S. and many other countries around the world. It’s hard to see the U.S. reluctance to lead as anything other than a sign of its inevitable, if slow, decline. The country’s institutionalized inequalities and systemic racism have been laid bare in recent months, and it no longer looks like a beacon for others to follow. The global balance of power is changing. China is both keen to assert a greater leadership role within traditionally Western-led institutions and to challenge the existing regional order in Asia. Between a rising China, revanchist Russia and new global actors, including non-state groups, we may be heading toward an increasingly multipolar or nonpolar world, which could prove destabilizing in its own right. Finally, the pacifying effect of nuclear weapons could be waning. While vast nuclear arsenals once compelled the United States and the Soviet Union to reach arms control agreements, old treaties are expiring and new talks are breaking down. **Mistrust is growing**, and the **chance of an** unwanted **U.S.-Russia nuclear confrontation is** arguably as **high** as it has been since the Cuban missile crisis. The theory of nuclear peace may no longer hold if more countries are tempted to obtain their own nuclear deterrent. Trump’s decision to abandon the Iran nuclear deal, for one thing, has only increased the chance that Tehran will acquire nuclear weapons. It’s almost easy to forget that, just a few short months ago, the United States and Iran were one miscalculation or dumb mistake away from waging all-out war. And despite Trump’s efforts to negotiate nuclear disarmament with Kim Jong Un’s regime in Pyongyang, it is wishful thinking to believe North Korea will give up its nuclear weapons. At this point, negotiators can only realistically try to ensure that North **Korea’s** **nuclear menace** **doesn’t get** even **more potent**. In other words, by turning inward, the United States is choosing to leave other countries to fend for themselves. The end result may be a less stable world with more nuclear actors. If leaders are smart, they will take seriously the warning signs exposed by this global emergency and work to reverse the drift toward war. If only one of these theories for peace were worsening, concerns would be easier to dismiss. But **together**, they are unsettling. While the world is not yet on the brink of **World War III** and no two countries are destined for war, the odds of avoiding future conflicts don’t look good. The pandemic is already degrading democracies, harming economies and curtailing international cooperation, and it also seems to be fostering internal instability within states. Rachel Brown, Heather Hurlburt and Alexandra Stark argue that the coronavirus could in fact sow more civil conflict. If this proves accurate, the increase in civil wars is likely to lead to more external meddling, and these next **proxy wars** **could** soon **precipitate all-out international conflicts** if outsiders aren’t careful. **With** the **usual deterrents to conflict declining** around the world, **major wars could soon return**.

### 1NC—CASE

#### Ressentiment is key to social change

Solomon 3. Robert C., Prof of Philosophy @ UT-Austin, Living with Nietzsche: What the Great “Immoralist” Has to Teach Us, p. 102-5

Contrary to the most familiar accounts of Nietzsche’s ethics and many¶ of his own uncompromising condemnatory statements, Nietzsche has mixed¶ feelings about resentment. If creativity is one of the highest virtues—and it¶ certainly seems to be for him—then resentment would seem to be one of the most virtuous emotions, for it is certainly among the most creative,¶ perhaps even more so than inspirational love. (Compare the schemes of¶ Iago and Richard the Third with the witless reactions of Othello and Orlando,¶ for example.) Insofar as language and insight, ruthless criticism and¶ mastery of irony are skills worth praising—Nietzsche is perfectly willing to¶ build an entire self out of them24— then resentment would seem to be one¶ of the most accomplished emotions as well, more articulate than even the¶ most righteous anger, more clever than the most covetous envy, more critical¶ than the indifferent spirit of reason would ever care to be. Not surprisingly,¶ our greatest critics and commentators are men and women of resentment.¶ Nietzsche is surely right, that our most vocal and influential moralists¶ are men and women of deep resentment—whether or not this is true of¶ morality as such. Our revolutionaries are men and women of resentment.¶ In an age deprived of passion—if Kierkegaard is to be believed—they alone¶ have the one dependable emotional motive, constant and obsessive, slowburning¶ but totally dependable and durable. Through resentment, they get things done. Whatever else it may be, resentment is not ineffectual.¶ Resentment may be an emotion that begins with an awareness of its¶ powerlessness, but by way of compensation (or “expression”), resentment¶ has forged the perfect weapon—an acid tongue and a strategic awareness¶ of the world, which in most social contexts guarantees parity if not victory¶ in most social conflicts. (I exclude bars in such places as Dallas and San¶ Bernadino, where a rapier tongue can quickly get one killed.) Thus the¶ irony, the dramatic turnaround of fortunes, in Nietzsche’s transvaluation of¶ values, where defensive resentment overpowers defenseless self-confidence¶ and the sense of inferiority overwhelms its superiors. The neo-Nietzschean¶ stereotypes are too often portrayed as the cultivated, noble master versus¶ the cloddish, vulgar slave. To be sure, the descriptions in Nietzsche’s Genealogy¶ certainly encourage such a reading. But the typology that actually¶ counts in the genealogy of resentment and morals is the articulate slave¶ and the comparatively tongue-tied, even witless master. It is the slave who¶ is sufficiently ingenious to do what even Nietzsche despairs of doing: he or¶ she invents new values. And it is the master, not the slave, who becomes¶ decadent and dependent and allows him- or herself to be taken in by the strategies of resentment. Hegel had it right in the Phenomenology; so did Joseph Losey in his 1963¶ movie The Servant. Speech is the swordplay of the impotent, but in the absence¶ of real swords it is often overpowering. Language may be the political¶ invention of the “herd” (as Nietzsche suggests in The Gay Science), but it is¶ also the medium in which real power is expressed and exchanged. Irony is¶ the ultimate weapon of resentment, and as Socrates so ably demonstrated,¶ it turns ignorance into power, personal weakness into philosophical¶ strength. It is no wonder that Nietzsche had such mixed feelings about his¶ illustrious predecessor who created the “tyranny of reason” as the successful¶ expression of his own will to power. Nietzsche used irony and “genealogy” as Socrates used dialectic, to undermine and ultimately dominate others¶ and their opinions.¶ Nietzsche tells us that certain emotions “drag us down with their stupidity”—but¶ resentment is surely not one of them. There is no emotion more clever, more powerful, more life-preserving if not life-enhancing, no emotion more conducive to the grand act of revenge that Nietzsche himself¶ wishes to perpetrate on modernity and the Christian world. Resentment creates its own power, which displaces its own targets and (even despite¶ itself) satisfies its desire for revenge. Thus the victory of the slave over the¶ master in Hegel’s Phenomenology. Thus the victory, writ large, of slave morality.¶ The felt impotence of resentment should not be confused with its expression, which is a kind of arrogance, or with the practical results of resentment, which sometimes tend to be powerful and effective indeed.¶ Thus what Nietzsche despises about resentment—and an ethics built out¶ of resentment—is not its lack of success, which he often acknowledges and even admires (e.g., in Genealogy of Morals, where he comments, “The¶ Jews were the priestly nation of ressentiment par excellence, in whom there¶ dwelt an unequaled popular-moral genius” and “A race of such men of ressentiment¶ is bound to become eventually cleverer than any noble race”);25 nor¶ can it be its expression, even when it is vicious. It is true that vengeance¶ often is vicious, insensitive to and uncaring about the needs of others, even¶ if it is overly sensitive to its own sense of slight or offense. But it is hard to¶ find Nietzschean grounds for an attack on viciousness or a defense of pity.¶ Nobles as masters can be (and sometimes ought to be) cruel, so it is not¶ cruelty as such that Nietzsche abhors. Indeed, although Nietzsche is sometimes¶ suspicious of cruelty as an expression of impotence and resentment¶ (one takes out on others what one cannot express to one’s actual oppressor),¶ he discusses cruel historical spectacles with remarkably little disgust¶ or criticism. Indeed, he even notes that “without cruelty there is no festival”¶ and “to see others suffer does one good, to make others suffer even more:¶ this is a hard saying but an ancient, mighty, human, all-too-human principle.”¶ 26 One might argue, of course, that the means that resentment employs in¶ obtaining power are hypocritical: one gains power by denying one’s power¶ and one advances one’s self-interest by appearing to be indifferent to one’s¶ self-interest (for example, by pointing to “the rules” or defending one’s action¶ strictly in the name of some “principle.”) The man of ressentiment is¶ devious. “His spirit loves hiding places, secret paths and back doors, everything¶ covert entices him as his world, his security, his refreshment; he understands¶ how to keep silent, how not to forget, how to wait, how to be¶ provisionally self-deprecating and humble.”¶ 27 But it is not clear to what¶ extent such duplicity and deception is hypocrisy rather than just smart strategy. Despite its display of indifference and disdain for power, resentment exemplifies the obsession with power. But isn’t this what “the will to power” is all about—or is there supposed to be some further (moral) prohi- bition, “power, yes, but not by hook or by crook”? Why should we suddenly¶ be so moral about a motive that bypasses or undercuts Morality? And does¶ the fact that resentment is “reactive” rather than “active” carry any critical¶ weight?28 For all of his harsh comments, I think that our conclusion should¶ be that Nietzsche has grudging respect for resentment as an emotional strategy, thus making his own continuous displays of resentment both more¶ excusable and more interesting.

#### The continual celebration of death is just juvenile shock tactics which create an apolitical apathy to suffering – our exposure of the banal and profound suffering caused by stigma encourages new modes of communal thinking capable of challenging modern death culture – that solves the K better

Noys 5. Benjamin, BSc, MA, DPhil, Professor of Critical Theory at the University of Chichester, *The Culture of Death*, Berg: New York, NY (2005), p. 144-6

Chapter Five examined the celebration of death as a transgressive experience in contemporary art. This celebration can be understood as the result of our exposure to death as bare life in modern culture. What is problematic is that it remains bewitched by bare life and fascinated with the threat of mass death. Although it might make that threat visible, quite literally, it leaves the politics of modern death invisible. The desire to shock and scandalise, the desire to find in the confrontation with death an experience of intensity, is actually quite limited. What we need to do is to move beyond an aesthetics of transgressive death (Bataille), or an aesthetics of intense life (Bacon/ Deleuze), to an aesthetics of bare life. I suggested that the profane and banal death in the car crash might be a better model of death in modern culture than the extreme experiences on which artists have so often concentrated. This is not to deny or ignore the need for an aesthetics of modern death, as Agamben seems to do. Instead, it is to suggest that the aesthetics of bare life is an aesthetics of exposure: the exposure to a banal and profane death. In this final chapter, I have turned to the politics of resistance to modern death. If the boundary between life and death is political, then it may well be that we need a politics of modern death to resist the new forms of our exposure to death. However, the value of resistance is problematic, especially when that resistance to power is located in the body or in life. The problem is that this resistance does not deal with bare life, but celebrates bare life as the site of resistance. As we rethought power in the light of death in Chapter Two, so now we have had to rethink resistance in the light of death in this chapter. It may well be that the value of resistance is exhausted in the face of our exposure to death and that we need a new politics of exodus from power. This politics is extremely ambiguous and has hardly even been developed yet. To develop it further, and so to gauge its worth, is not just a matter of critical analysis but also of practical and communal politics. The theorist cannot stand in for the practice of politics, but must encourage new and inventive modes of communal thinking that might allow us to think beyond the modern culture of death. I am not sure that it is possible to end on the reversal of the desperate state of the current situation into a new hope, as Agamben suggests. We might well actually require more careful and extended analysis of the culture of death, which contests some of the limits of our contemporary thinking. One way to do this, which I have used here, is to approach modern death through the concept of our exposure to death. This approach has no pretence to solving the problem of modern death or offering the definitive account of the contemporary culture of death. Instead, it is a critical starting point that I have developed to try and come to terms with the widespread sense of our exposure to death after Auschwitz and Hiroshima, and in the current time of the ‘war against terrorism’. The model of exposure to death allows us to recast the culture of death, to approach our history and the present in new ways. Perhaps it might also allow us to challenge both the visibility and invisibility of death in modern culture, and to analyse the culture of death as the culture of our survival in the face of the exposure to death.

#### Fear of death is inevitable and preserves existence – biology – makes their impacts inevitable.

Pyszczynski et al 6. Tom, Prof. Psych. – U. Colorado, Sheldon Solomon, Prof. Psych. – Skidmore College, Jeff Greenberg, Prof. Psych. – U. Arizona, and Molly Maxfield, U. Colorado, Psychological Inquiry, “On the Unique Psychological Import of the Human Awareness of Mortality: Theme and Variations” 17:4, Ebsco

Kirkpatrick and Navarette’s (this issue) first specific complaint with TMT is that it is wedded to an outmoded assumption that human beings share with many other species a survival instinct. They argue that natural selection can only build instincts that respond to specific adaptive challenges in specific situations, and thus could not have designed an instinct for survival because staying alive is a broad and distal goal with no single clearly defined adaptive response. Our use of the term survival instinct was meant to highlight the general orientation toward continued life that is expressed in many of an organism’s bodily systems (e.g., heart, liver, lungs, etc) and the diverse approach and avoidance tendencies that promote its survival and reproduction, ultimately leading to genes being passed on to fu- ture generations. Our use of this term also reflects the classic psychoanalytic, biological, and anthropological influences on TMT of theorists like Becker (1971, 1973, 1975), Freud (1976, 1991), Rank (1945, 1961, 1989), Zilborg (1943), Spengler (1999), and Darwin (1993). We concur that natural selection, at least initially, is unlikely to design a unitary survival instinct, but rather, a series of specific adaptations that have tended over evolutionary time to promote the survival of an organism’s genes. However, whether one construes these adaptations as a series of discrete mechanisms or a general overarching tendency that encompasses many specific systems, we think it hard to argue with the claim that natural selection usually orients organisms to approach things that facilitate continued existence and to avoid things that would likely cut life short. This is not to say that natural selection doesn’t also select for characteristics that facilitate gene survival in other ways, or that all species or even all humans, will always choose life over other valued goals in all circumstances. Our claim is simply that a general orientation toward continued life exists because staying alive is essential for reproduction in most species, as well as for child rearing and support in mammalian species and many others. Viewing an animal as a loose collection of independent modules that produce responses to specific adaptively-relevant stimuli may be useful for some purposes, but it overlooks the point that adaptation involves a variety of inter-related mechanisms working together to insure that genes responsible for these mechanisms are more numerously represented in future generations (see, e.g., Tattersall, 1998). For example, although the left ventricle of the human heart likely evolved to solve a specific adaptive problem, this mechanism would be useless unless well-integrated with other aspects of the circulatory system. We believe it useful to think in terms of the overarching function of the heart and pulmonary-circulatory system, even if specific parts of that system evolved to solve specific adaptive problems within that system. In addition to specific solutions to specific adaptive problems, over time, natural selection favors integrated systemic functioning(Dawkins, 1976; Mithen, 1997). It is the improved survival rates and reproductive success of lifeformspossessing integrated systemic characteristics that determine whether those characteristics become widespread in a population. Thus, we think it is appropriate and useful to characterize a glucose-approaching amoeba and a bear-avoiding salmon as oriented toward self-preservation and reproduction, even if neither species possesses one single genetically encoded mechanism designed to generally foster life or insure reproduction, or cognitive representations of survival and reproduction. This is the same position that Dawkins (1976) took in his classic book, The selfish gene: The obvious first priorities of a survival machine, and of the brain that takes the decisions for it, are individual survival and reproduction. … Animals therefore go to elaborate lengths to find and catch food; to avoid being caught and eaten themselves; to avoid disease and accident; to protect themselves from unfavourable climatic conditions; to find members of the opposite sex and persuade them to mate; and to confer on their children advantages similar to those they enjoy themselves. (pp. 62–63) All that is really essential to TMT is the proposition that humans fear death. Somewhat ironically, in the early days of the theory,we felt compelled to explain this fear by positing a very basic desire for life, because many critics adamantly insisted, for reasons that were never clear to us, that most people do not fear death. Our explanation for the fear of death is that knowledge of the inevitability of death is frightening because people know they are alive and because they want to continue living. Do Navarrete and Fessler (2005) really believe that humans do not fear death? Although people sometimes claim that they are not afraid of death, and on rare occasions volunteer for suicide missions and approach their death, this requires extensive psychological work, typically a great deal of anxiety, and preparation and immersion in a belief system that makes this possible (see TMT for an explanation of how belief systems do this). Where this desire for life comes from is an interesting question, but not essential to the logic of the theory. Even if Kirkpatrick and Navarrete (this issue) were correct in their claims that a unitary self-preservation instinct was not, in and of itself, selected for, it is indisputable that many discrete and integrated mechanisms that keep organisms alive were selected for. A desire to stay alive, and a fear of anything that threatens to end one’s life, are likely emergent properties of these many discrete mechanisms that result from the evolution of sophisticated cognitive abilities for symbolic, future- oriented, and self-reflective thought. As Batson and Stocks (2004) have noted, it is because we are so intelligent, and hence so aware of our limbic reactions to threats of death and of our many systems oriented toward keeping us alive that we have a general fear of death. Here are three quotes that illustrate this point. First, for psychologists, Zilboorg (1943), an important early source of TMT: “Such constant expenditure of psychological energy on the business of preserving life would be impossible if the fear of death were not as constant” (p. 467). For literature buffs, acclaimed novelist Faulkner (1990) put it this way: If aught can be more painful to any intelligence above that of a child or an idiot than a slow and gradual confronting with that which over a long period of bewil- derment and dread it has been taught to regard as an irrevocable and unplumbable finality, I do not know it. (pp. 141–142) And perhaps most directly, for daytime TV fans, from The Young and the Restless (2006), after a rocky plane flight: Phyllis: I learned something up in that plane Nick: What? Phyllis: I really don’t want to die. An important consequence of the emergence of this general fear of death is that humans are susceptible to anxiety due to events or stimuli that are not immediately present and novel threats to survival that did not exist for our ancestors, such as AIDS, guns, or nuclear weapons. Regardless of how this fear originates, it is abundantly clear that humans do fear death. Anyone who has ever faced a man with a gun, a doctor saying that the lump on one’s neck is suspicious and requires further diagnostic tests, or a drunken driver swerving into one’s lane can attest to that. If humans only feared evolved specific death-related threats like spiders and heights, then a lump on an x-ray, a gun, a crossbow, or any number of weapons pointed at one’s chest would not cause panic; but obviously these things do. Of what use would the sophisticated cortical structures be if they didn’t have the ability to instigate fear reactions in response to such threats?

#### **We have an alternative theory of knowledge production: perfect access to ontological knowledge is impossible, but inverting the error by disavowing grounding entirely maintains the same telic approach it aims to critique**

– only the strategic humility of contingent pluralism enables a critical reflexivity that disrupts xenophobia while retaining the possibility of accomplishing specific goals

Paipais 17. Vassilios, Political Ontology and International Political Thought: Voiding a Pluralist World, International Political Theory Series (2017), p. 7-14

Any attempt to resist positing or representing a worldly ground for knowledge—by referring to a representational condition such as the subject, logic, language, structure or difference—can always be represented as one more thing within the world, a represented thing that grounds the represented world in general. (Colebrook 2005, p. 211) The error here is to misrecognise Kant’s lesson that the world is never immediately given to us but is only ‘lived’ through representation. If the realisation that any sense of autonomy, sovereign certainty and spatiotemporal identity is never self-present, never coterminous with itself is deceptively translated as an improved, perhaps more ‘authentic’, representation of the world, then the idols of modernity, the false images of representation and transparency, are simply smuggled back in to haunt our critical endeavours: ‘Any demystification of a grounding substance, such as man or the subject, tends to result in the positing of yet one more ground: language, the unconscious, structure or difference’ (Colebrook 2005, p. 250). From Foundational to Political Ontology If the above exposition provides a fair description of the paradoxes and inherent contestability involved in any ontological statement uttered from a finite point of view, the question then that arises is, how is it possible to deflect the illusion of an ‘authentic’ representation of the world without at the same time rejecting the valuable insight that the world is always seen from or given to an ‘inside’ viewpoint? How is it possible to reject the quest for a permanent ground from which the world can be known without discarding the condition of possibility for intelligibility itself, that is, our ability to relate meaningfully to the world as an ‘object’ available to our cognition? 11 Part of what might be creating the impasse or sense of a deadlock here is our understanding of the word ‘world’. In our common sense experience, we perceive the world as something external to us, an empty space within which human beings and objects interact. Such a view of the world however might be rather limiting and self-contradictory as it understands the latter as an infinite totality containing an innumerable amount of ‘objects’; that is, totality is envisaged as the ultimate set of all sets. Putting the issue in those terms, however, might condemn us to a category mistake that may be avoided by resorting to the Heideggerian distinction between ‘world’ as an external realm of entities (observable or unobservable) or a variety of universes (‘worlds’), on the one hand, and ‘worlding’ as a clearing (Lichtung) or disclosure of meanings and practices that make those worlds possible, on the other hand. 12 The reason why the ontic actuality of multiple worlds and the condition that enables their emergence cannot be of the same order is rather nicely demonstrated in Sergei Prozorov’s (2014a, b) recent elaboration of a full-blown nihilist ontology in his two-volume magnum opus, Void Universalism (see Paipais 2016 for a review). Prozorov’s project purports to offer an enriched notion of ontology in world politics, one that reconceptualises the way it is traditionally understood in IR (International Relations) circles in order to think through the problem of pluralism beyond the confines set by the oscillation between anthropologism and anthropomorphism as explained above. The main issue with the metatheoretical theorisation and employment of the concept of ontology in world politics, as Prozorov understands it, is that it is usually taken to mean the basic assumptions or unassailable presuppositions that foreground ontology as an in the last instance ‘structure’ or inaccessible philosophical ‘wager’, a view that, for Prozorov (2013, p. 105), would better go by the name of political anthropology, worldview or ideology. Engaging creatively with Heidegger’s fundamental ontology that informs the work of the philosophers he draws on, such as Jean-Luc Nancy, Jacques Rancière, Alain Badiou and Giorgio Agamben, Prozorov builds on the Heideggerian distinction between the ontological and the ontic to propose an alternative conception of world politics as nothingness, that is, the necessarily inexistent ‘object’ that makes objects in the ontic world of politics possible. Prozorov ( 2014a, p. 9) also borrows from Badiou’s set-theoretical ontology, ‘because it deals with being qua being and not any particular classes of beings’. In a rehash of Russell’s paradox, Prozorov explains that a conception of the world as the set of all sets would necessarily include all things and their negation, including the non-existence of itself, resulting in the absurdity of a power set that is far greater than the original: ‘Since every world is a world of worlds, the international world may of course contain an infinite multiplicity of worlds, but the only thing that this or any other world cannot contain is everything’ (Prozorov 2014a, pp. 20–21). Prozorov argues, instead, for the World (with a capital ‘W’) as nothing, a void set that represents pure potentiality or else the quasi-transcendental (non-)ground that is the condition of possibility for anything existing in the ontic world. The latter is rendered by necessity not-all there is, that is, necessarily incomplete. Not because its entirety is inaccessible or potentially infinite, but because totality as infinity has no being. Prozorov, then, convincingly demonstrates why ontology, instead of being a futile search for first principles or for the primordial traits of human nature, has to be thought as deriving from a necessary nihil/void that itself does not appear in the ontic world but is responsible for the production of myriads of worlds. If the impossibility of an ultimate foundation as the set of all sets were not necessary but contingent, that is, if an ultimate ground were ontologically possible but cognitively inaccessible, then one would be left with a position of agnostic relativism that would acknowledge the empirical fact of pluralism and the ungroundability of a positive ontology, but could never discard the possibility of a non-contingent (i.e. absolute) universal. For a number of post-Heideggerian thinkers who build, like Prozorov, on ‘ontologies of lack’ (see Tønder and Thomassen 2006), the social field exceeds totalisation, not because of its ontic multiplicity, but because it is structured around a fundamental (not foundational) lack, a nothingness, that is generative of multiple worlds and allows the play of differences in the ontic realm. For those thinkers (Badiou 2009; Laclau and Mouffe 1985; Žižek 1999; Agamben 1998), the ultimate grounding of a social system is implausible, not because of its empirical complexity that escapes the cognitive capacities of any finite observer, but rather because there is an ontological difference between the ontic level of the processes of grounding and the ontological level as the void that makes these processes possible, yet necessarily incomplete. In an earlier article on the question of foundationalism in IR theories, Marc Doucet (1999) made a similar point arguing that the nature of metatheoretical debates in the field reflects a foundationalist bias which is, ultimately, symptomatic of the eclipse of the political from those debates. This direct link drawn between foundationalism and depoliticisation was not peculiar to Doucet’s critique but reflected the wider sensibility of a number of critical IR scholars. However, Doucet went a step further. He pointed at the stagnated status of metatheoretical reflection in IR which seemed ~~paralysed~~ [stuck] between two mutually exclusive positions, foundationalism versus anti-foundationalism, generating a theoretical impasse. The claim here is linked to what is sometimes described by scholars in the field (Smith 1995; Smith et al. 1996; Sjolander and Cox 1994) as the distinction between ‘explanatory’ and ‘constitutive’ theory. Whereas explanatory or, as Robert Cox (1981) labelled them, ‘problem-solving’ theories seem to be straightforwardly characterised as foundationalist, taking an independently existing world ‘out there’ to be an object of social scientific inquiry, constitutive or post-positivist theories usually come in two versions. Although both renditions subscribe to social constructionism—the idea that theory is always already implicated in the constitution of the world it seeks to explain—IR theorists tend to divide them into two categories that reflect similar developments in political theory between what has been called Habermasian Critical Theory and Foucauldian/Derridian post-structuralist thought. For instance, Smith ( 1995) seems to follow Hoffman and Rengger ( 1992) in dividing postpositivist theories into ‘critical interpretative’ (critical theory) and ‘radical interpretative’ (post- structuralist) strands. Typically, the former remains tied to a minimal foundationalism upon which an emancipatory project could still be grounded while the latter vehemently rejects any trace of foundationalism as a residue of Enlightenment’s blackmail (see Devetak 1995) leading to marginalisation, exclusion and violence. Doucet touched here on an extremely sensitive issue regarding the nature and legitimacy of metatheoretical arguments in IR, one that is inextricably linked to the ontological claims IR theorists make not only about their subject matter but also about the nature of theory itself and, if one accepts the interlacing of theory and practice, the normative underpinnings of political action as well. 14 In the aftermath of the post-positivist critique of mainstream IR, foundationalism—the claim that there are unshakeable grounds for judging between rival philosophical, epistemological or praxeological standpoints—is either discredited or becoming increasingly difficult to justify. Foundationalism may arguably be losing ground and credibility, yet the terrifying spectre of relativism or practical irrelevance that a complete surrender to anti-foundationalism would entail has enabled the development of a middle-ground accommodationism as a way of securing the possibility of knowledge or the ground for political action without falling back on dogmatic, uncritical or [agency-denying] self-paralysing positions. The burgeoning literature on the evils of rigid paradigmatic thinking in the discipline as opposed to the merits of an eclectic or pluralist sensibility is a testament to the growing anxiety the retreat of foundations is prompting among theoretical circles and the pragmatic responses it generates. 15 A relatively recent, widely discussed, attempt to advance this pragmatic pluralist mood calls for a strategy of bracketing foundationalist assumptions and embracing ‘foundational prudence’ (Monteiro and Ruby 2009). Since in the aftermath of the post-positivist critique we, as scholars, have lost the capacity to ascribe authoritative status to foundational metatheoretical statements, the argument goes, the best we can do is to get on with our research while isolating any debilitating Philosophy of Science debates that cannot be authoritatively decided. However, this move still rests on an agnostic attitude towards possibly existing absolute foundations, that is, it has not yet escaped the foundationalist mindset. In principle, it still allows for the possibility of any particular foundationalist claim being ‘true’ or ‘real’ in some deep ontological or axiomatic sense, even though that ‘knowledge’ is inaccessible to our cognitive capacities. 16 Even if we relied on the recent distinction proposed by Patomäki, Wight and Jackson (Patomäki and Wight 2000; Jackson 2010) between philosophical and scientific ontology—where the latter refers to a ‘catalog of objects, processes and factors that a given line of scientific research expects to exist or has evidence for the existence of’, and the latter pertains to the question of our ‘hook-up to the world, how we as researchers are able to produce knowledge in the first place’ (Jackson 2010, p. 28)—neither discourse escapes the foundationalist bind. Ontology is still read either as denoting worldly objects as ontic beings, an approach that from a Heideggerian point of view would rather be described as ontical or phenomenological (Heidegger 1996; Badiou 2009; Prozorov 2014a; Michel 2013), 17 or ‘it supplants the question of being with the question of the knowledge of some beings by others, thereby slipping into the same ontical terrain, becoming indistinct from what we usually call “methodology”’ (Prozorov 2013, p. 105). What becomes gradually clear here is that the common feature of the conventional understanding of ontology in IR tends to conceptualise ontology as presence, as an ultimate ground of social reality or the social knowledge authorising our access to it. The paradoxical effect of such an understanding of ontology is that any rejection, bracketing or neutralisation of foundational claims is essentially ineffective as long as it labours under the foundationalist imaginary of ontology as an ultimate ground. This is why eliminating the quest for foundations or suspending their absolute claim while still residing in an ontic Gestalt about foundations may temporarily allay our pluralist anxieties but does not take us out of the vicious circle (see also Walker 2010). What is needed, instead, is an alternative theorising of ontology that would build on the aporia of the impossibility and necessity of grounds without: (1) resurrecting the spectres of ultimate foundations that would revert us to a foundational ontology and (2) resulting in the embracement of a negative antifoundationalism that would be both debilitating and self-defeating (still occupying a foundational ontological imaginary). In his recent study of post-foundational political thought, Oliver Marchart ( 2007) puts forward a vision of political ontology that attempts to tackle the above aporia. Drawing on a host of post- Heideggerian thinkers, such as Claude Lefort, Alain Badiou, Jean-Luc Nancy and Ernesto Laclau, he relates the retreat of foundationalism in late modernity to the distinction, drawn by many prominent Anglo-American and continental thinkers, between politics and the political. 18 Marchart (2007, p. 14) notes that we should treat this distinction as symptomatic of the crisis of foundationalism in late modernity that enabled a reappreciation of the role of radical contingency (the political) in politics and questioned traditional grounds of political legitimacy. The post-foundationalist thinkers he examines, however, do not deny the inescapability of grounds altogether. Rather, their post-foundationalism only undermines the ‘absolutisation of notions such as totality, universality, essence and ground’ (emphasis added). In that sense, these thinkers consciously set themselves apart from vulgar forms of anti-foundationalism or postmodern relativism which tend to regress to a mirror image of the same totalising gesture of foundationalism. Marchart’s intuitive proposal here is that instead of resurrecting the spectres of foundationalism by assuming the absence of any ground, a more effective strategy would involve denying the existence of an ultimate ground. This move opens the conceptual space to think the possibility of many grounds but without regressing to some nihilistic postmodern caricature of pluralism according to which all solid foundations have melted into air and therefore meaning has lost its diacritic capacity. This conception of post-foundationalism does not deny the inescapability of grounds. It only works from within to undermine the fetishisation of any operation grounding the social, that is, its transformation into an ultimate ground or essence. Ultimately, this type of post-foundationalism does not seek to erase foundations, only to inaugurate an ethos of constant interrogation of metaphysical pretensions to foundations and contest their ‘identitarian’ status (Prozorov 2009, p. 220; Marchart 2007, p. 2; Nancy 2008, pp. 18–24). Foundations are still operative and their inescapability acknowledged, but what has been added is the recognition of their ontological status as necessarily contingent (Marchart 2007, p. 31). As Marchart ( 2007, pp. 18–22) argues, the argument that the absence of an ultimate ground does not necessarily entail the elimination of the process of grounding can be traced back to Martin Heidegger’s ( 1994, p. 29) conceptualisation of the ground as an abyss (‘Der Ab-grund ist Ab- grund’), that is, as a ground without ground or a bottomless void. Heidegger does not understand the place of the absent ground as empty in the ordinary or commonsensical view of the term. The ground, for Heidegger, is necessarily abyssal which means it is the ontological nothing and not a simple ontic nullity. It is then precisely by remaining necessarily empty (since the ontological nothing cannot appear as such in the world), that is, by incessantly deferring its own fulfilment, that it remains always open, endlessly generating new possibilities of grounding. The two possibilities of grounding/degrounding and abyss, or, else, order/disorder and the void that operates as their condition of possibility, have to be differentiated in some way since it is this differentiation that permits the appearance of beings in the ontic world. Yet, the two cannot be separated neatly as they ceaselessly interpenetrate. In that way, Heidegger allows for both the non-identity of the two terms that is generative of the process of grounding and the inseparable mutual entanglement of ground and abyss that accounts for the paradoxical effect of the same process of grounding/degrounding on the ontic level. The site of non-dialectical negativity in this Heideggerian formulation is the difference between the ontological and the ontic. To ask the grounding question, for Heidegger, is to think through the problem of grounding under conditions of an abyssal ground and, at the same time, to rethink difference from the perspective of the ontological question. 19 The play between being qua Being and beings should be thought not in terms of an ontic difference between the two but as the very happening (the unconcealment/concealment) of the difference between beings and being as difference. As a result, a space of freedom opens up whose very condition is the void, the emptiness, the very absence of an ontic ground: […] it is precisely because we cannot access the ontological level directly that—if we want to approach it at all—we will have necessarily to pass through the ontic level, in order to ‘wave’ at something which will always escape our grasp because of the irremediable gap between the ontological and the ontic, beingness and beings, the ground and what is grounded. (Marchart 2007, p. 24) The assumption of a ground which is present in its absence and visible through the effects it produces eventually paves the way for the possibility of multiple grounds on the ontic level. In fact, the possibility for grounds in the plural is an effect of the impossibility of a present, singular ground (Nancy 2001). If this is true, then Marchart is right that the contingency arising out of this condition is not accidental but necessary. In modernity, the horizon of the experience of this uncertainty has expanded, although its reception has always been met with resistance. The experience of the paradoxical or the uncanny in early modern Europe, through the encounter with internal (Jews) or external (native Americans, Islam, Russia) others (see Todorov 1984; Neumman and Welsh 1991), had to be kept at bay 20 while, in the realm of philosophy, Cartesian subjectivity restored the threatened epistemological certainty in the domains of knowledge and science replacing earlier forms of reasoning such as medieval casuistry and Renaissance scepticism (see Toulmin 1992). This rehabilitation of the idea of contingency does not subscribe to a linear conception of a progressive awareness of the pervasive role of radical uncertainty in politics—which would be equally teleological as the opposite discourse of certainty. And yet, it does imply that the potentially paradoxical nature of ground had always been perceived historically in different forms, such as the Machiavellian Fortuna, the relativism of Montaigne and the pre-Cartesian humanists, residual discourses like mysticism, astrology, alchemy, theology and rhetoric. Yet, as will be substantiated in Chap. 5, this claim does not assign a supra-historical quality to the experience of contingency. It only submits that while both the experience of contingency and its reflective enactment are subject to certain historico-empirical conditions, the historical itself is the ever-changing condition for the transcendental to emerge (Lacoue-Labarthe and Nancy 1997; Badiou 2001; Žižek 1993). In this sense, positing this moment of necessary contingency does not succumb to a ~~disabling~~ [fatalist] historicism that pronounces the relativity of all concrete ontic political structures. Rather, it corresponds to the Nietzschean call for a consistent or thorough-going nihilist ontology that guards against the twin pitfalls of active and passive nihilism. 21 The latter two possibilities equally represent the failure of political thinking to move beyond the metaphysical grounding of the political. In contrast, the difference between the ontic and the ontological has to be maintained if one is to recognise both the plurality of contingent foundations that temporarily ground the social and the impossibility of a final metaphysical closure that sustains that plurality as its condition of possibility/impossibility.

#### Focus on large scale catastrophes is good and they outweigh – appeals to social costs, moral rules, and securitization play into cognitive biases and flawed risk calculus – 2020 is living proof

Weber 20 (ELKE U. WEBER is Gerhard R. Andlinger Professor in Energy and the Environment and Professor of Psychology and Public Affairs at Princeton University.), November-December 2020 Issue, "Heads in the Sand," Foreign Affairs, <https://www.foreignaffairs.com/articles/2020-10-13/heads-sand> mvp

We are living in a time of crisis. From the immediate challenge of the COVID-19 pandemic to the looming existential threat of climate change, the world is grappling with massive global dangers—to say nothing of countless problems within countries, such as inequality, cyberattacks, unemployment, systemic racism, and obesity. In any given crisis, the right response is often clear. Wear a mask and keep away from other people. Burn less fossil fuel. Redistribute income. Protect digital infrastructure. The answers are out there. What’s lacking are governments that can translate them into actual policy. As a result, the crises continue. The death toll from the pandemic skyrockets, and the world makes dangerously slow progress on climate change, and so on.

It’s no secret how governments should react in times of crisis. First, they need to be nimble. Nimble means moving quickly, because problems often grow at exponential rates: a contagious virus, for example, or greenhouse gas emissions. That makes early action crucial and procrastination disastrous. Nimble also means adaptive. Policymakers need to continuously adjust their responses to crises as they learn from their own experience and from the work of scientists. Second, governments need to act wisely. That means incorporating the full range of scientific knowledge available about the problem at hand. It means embracing uncertainty, rather than willfully ignoring it. And it means thinking in terms of a long time horizon, rather than merely until the next election. But so often, policymakers are anything but nimble and wise. They are slow, inflexible, uninformed, overconfident, and myopic.

Why is everyone doing so badly? Part of the explanation lies in the inherent qualities of crises. Crises typically require navigating between risks. In the COVID-19 pandemic, policymakers want to save lives and jobs. With climate change, they seek a balance between avoiding extreme weather and allowing economic growth. Such tradeoffs are hard as it is, and they are further complicated by the fact that costs and benefits are not evenly distributed among stakeholders, making conflict a seemingly unavoidable part of any policy choice. Vested interests attempt to forestall needed action, using their money to influence decision-makers and the media. To make matters worse, policymakers must pay sustained attention to multiple issues and multiple constituencies over time. They must accept large amounts of uncertainty. Often, then, the easiest response is to stick with the status quo. But that can be a singularly dangerous response to many new hazards. After all, with the pandemic, business as usual would mean no social distancing. With climate change, it would mean continuing to burn fossil fuels.

But the explanation for humanity’s woeful response to crises goes beyond politics and incentives. To truly understand the failure to act, one must turn to human psychology. It is there that one can grasp the full impediments to proper decision-making—the cognitive biases, emotional reactions, and suboptimal shortcuts that hold policymakers back—and the tools to overcome them.

AVOIDING THE UNCOMFORTABLE

People are singularly bad at predicting and preparing for catastrophes. Many of these events are “black swans,” rare and unpredictable occurrences that most people find difficult to imagine, seemingly falling into the realm of science fiction. Others are “gray rhinos,” large and not uncommon threats that are still neglected until they stare you in the face (such as a coronavirus outbreak). Then there are “invisible gorillas,” threats in full view that should be noticed but aren’t—so named for a psychological experiment in which subjects watching a clip of a basketball game were so fixated on the players that they missed a person in a gorilla costume walking through the frame. Even professional forecasters, including security analysts, have a poor track record when it comes to accurately anticipating events. The COVID-19 crisis, in which a dystopic science-fiction narrative came to life and took everyone by surprise, serves as a cautionary tale about humans’ inability to foresee important events.

Not only do humans fail to anticipate crises; they also fail to respond rationally to them. At best, people display “bounded rationality,” the idea that instead of carefully considering their options and making perfectly rational decisions that optimize their preferences, humans in the real world act quickly and imperfectly, limited as they are by time and cognitive capacity. Add in the stress generated by crises, and their performance gets even worse.

Because humans don’t have enough time, information, or processing power to deliberate rationally, they have evolved easier ways of making decisions. They rely on their emotions, which serve as an early warning system of sorts: alerting people that they are in a positive context that can be explored and exploited or in a negative context where fight or flight is the appropriate response. They also rely on rules. To simplify decision-making, they might follow standard operating procedures or abide by some sort of moral code. They might decide to imitate the action taken by other people whom they trust or admire. They might follow what they perceive to be widespread norms. Out of habit, they might continue to do what they have been doing unless there is overwhelming evidence against it.

Not only do humans fail to anticipate crises; they also fail to respond rationally to them.

Humans evolved these shortcuts because they require little effort and work well in a broad range of situations. Without access to a real-time map of prey in different hunting grounds, for example, a prehistoric hunter might have resorted to a simple rule of thumb: look for animals where his fellow tribesmen found them yesterday. But in times of crisis, emotions and rules are not always helpful drivers of decision-making. High stakes, uncertainty, tradeoffs, and conflict—all elicit negative emotions, which can impede wise responses. Uncertainty is scary, as it signals an inability to predict what will happen, and what cannot be predicted might be deadly. The vast majority of people are already risk averse under normal circumstances. Under stress, they become even more so, and they retreat to the familiar comfort of the status quo. From gun laws to fossil fuel subsidies, once a piece of legislation is in place, it is hard to dislodge it, even when cost-benefit analysis argues for change.

### 1NC :)

#### Make Adam Smith proud:

#### Tech innovation undergirded by profit motives are driving the Second Machine Age, which dematerializes capitalism and makes growth a sustainable necessity

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)

The decreases in resource use, pollution, and other exploitations of the earth cataloged in the preceding chapters are great news. But are they going to last? It could be that we're just living in a pleasant interlude between the Industrial Era and another rapacious period during which we massively increase our footprint on our planet and eventually cause a giant Malthusian crash.

It could be, but I don't think so. Instead, I think we're going to take better care of our planet from now on. I'm confident that the Second Machine Age will mark the time in our history when we started to progressively and permanently tread more lightly on the earth, taking less from it and generally caring for it better, even as we humans continue to become more numerous and prosperous. The work of Paul Romer, who shared the 2018 Nobel Prize in economics, is one of the sources of this confidence.

Growth Mindset

Romer's largest contribution to economics was to show that it's best not to think of new technologies as something that companies buy and bring in from the outside, but instead as something they create themselves (the title of his most famous paper, published in 1990, is "Endogenous Technological Change"). These technologies are like designs or recipes; as Romer put it, they’re "the instructions that we follow for combining raw materials." This is close to the definitions of technology presented in chapter 7.

Why do companies invent and improve technologies? Simply, to generate profits. They come up with instructions, recipes, and blueprints that will let them grow revenues or shrink costs. As we saw repeatedly in chapter 7, capitalism provides ample incentive for this kind of tech progress.

So far, all this seems like a pretty standard argument for how the first two horsemen work together. Romer's brilliance was to highlight the importance of two key attributes of the technological ideas companies come up with as they pursue profits. The first is that they're nonrival, meaning that they can be used by more than one person or company at a time, and that they don't get used up. This is obviously not the case for most resources made out of atoms—I can't also use the pound of steel that you've just incorporated into the engine of a car—but it is the case for ideas and instructions. The Pythagorean theorem, a design for a steam engine, and a recipe for delicious chocolate chip cookies aren't ever going to get "used up" no matter how much they're used.

The second important aspect of corporate technologies is that they're partially excludable. This means that companies can kind of prevent others from using them. They do this by keeping the technologies secret (such as the exact recipe for Coca-Cola), filing for patents and other intellectual-property protection, and so on. However, none of these measures is perfect (hence the words partially and kind of). Trade secrets leak. Patents expire, and even before they expire, they must describe the invention they're claiming and so let others study it.

Partial excludability is a beautiful thing. It provides strong incentives for companies to create useful, profit-enhancing new technologies that they alone can benefit from for a time, yet it also ensures that the new techs will eventually "spill over"—that with time they’ll diffuse and get adopted by more and more companies, even if that's not what their originators want.

Romer equated tech progress to the production by companies of nonrivalrous, partially excludable ideas and showed that these ideas cause an economy to grow. What's more, he also demonstrated that this idea-fueled growth doesn't have to slow down with time. It's not constrained by the size of the labor force, the amount of natural resources, or other such factors. Instead, economic growth is limited only by the idea-generating capacity of the people within a market. Romer called this capacity "human capital" and said at the end of his 1990 paper, "The most interesting positive implication of the model is that an economy with a larger total stock of human capital will experience faster growth."

This notion, which has come to be called "increasing returns to scale," is as powerful as it is counterintuitive. Most formal models of economic growth, as well as the informal mental ones most of us walk around with, feature decreasing returns—growth slows down as the overall economy gets bigger. This makes intuitive sense; it just feels like it would be easier to experience 5 percent growth in a $1 billion economy than a $1 trillion one. But Romer showed that as long as that economy continued to add to its human capital—the overall ability of its people to come up with new technologies and put them to use—it could actually grow faster even as it grew bigger. This is because the stock of useful, nonrivalrous, nonexcludable ideas would keep growing. As Romer convincingly showed, economies run and grow on ideas.

The Machinery of Prosperity

Romer's ideas should leave us optimistic about the planetary benefits of digital tools—hardware, software, and networks—for three main reasons. First, countless examples show us how good these tools are at fulfilling the central role of technology, which is to provide "instructions that we follow for combining raw materials." Since raw materials cost money, profit-maximizing companies are particularly keen to find ways to use fewer of them. So they use digital tools to come up with beer cans that use less aluminum, car engines that use less steel and less gas, mapping software that removes the need for paper atlases, and so on and so on. None of this is done solely for the good of the earth—it's done for the pursuit of profit that's at the heart of capitalism—yet it benefits the planet by, as we've seen, causing us to take less from it.

Digital tools are technologies for creating technologies, the most prolific and versatile ones we've ever come up with. They're machines for coming up with ideas. Lots of them. The same piece of computer-aided design software can be used to create a thinner aluminum can or a lighter and more fuel-efficient engine. A drone can be used to scan farmland to see if more irrigation is needed, or to substitute for a helicopter when filming a movie. A smartphone can be used to read the news, listen to music, and pay for things, all without consuming a single extra molecule.

In the Second Machine Age, the global stock of digital tools is increasing much more quickly than ever before. It's being used in countless ways by profit-hungry companies to combine raw materials in ways that use fewer of them. In advanced economies such as America's, the cumulative impact of this combination of capitalism and tech progress is clear: absolute dematerialization of the economy and society, and thus a smaller footprint on our planet.

The second way Romer's ideas about technology and growth are showing up at present is via decreased excludability. Pervasive digital tools are making it much easier for good designs and recipes to spread around the world. While this is often not what a company wants—it wants to exclude others from its great cost-saving idea— excludability is not as easy as it used to be.

This isn't because of weaker patent protection, but instead because of stronger digital tools. Once one company shows what's possible, others use hardware, software, and networks to catch up to the leader. Even if they can't copy exactly because of intellectual-property restrictions, they can use digital tools to explore other means to the same end. So, many farmers learn to get higher yields while using less water and fertilizer, even though they combine these raw materials in different ways. Steve Jobs would certainly have preferred for Apple to be the only provider of smartphones after it developed the iPhone, but he couldn't maintain the monopoly no matter how many patents and lawsuits he filed. Other companies found ways to combine processors, memory, sensors, a touch screen, and software into phones that satisfied billions of customers around the world.

The operating system that powers most non-Apple smartphones is Android, which is both free to use and freely modifiable. Google's parent company, Alphabet, developed and released Android without even trying to make it excludable; the explicit goal was to make it as widely imitable as possible. This is an example of the broad trend across digital industries of giving away valuable technologies for free.

The Linux operating system, of which Android is a descendant, is probably the best-known example of free and open-source software, but there are many others. The online software repository GitHub maintains that it's "the largest open source community in the world" and hosts millions of projects. The Arduino community does something similar for electronic hardware, and the Instructables website contains detailed instructions for making equipment ranging from air-particle counters to machine tools, all with no intellectual-property protection. Contributors to efforts such as these have a range of motivations (Alphabet's goals with Android were far from purely altruistic—among other things, the parent of Google wanted to achieve a quantum leap in mobile phone users around the world, who would avail themselves of Google Search and services such as YouTube), but they're all part of the trend of technology without excludability, which is great news for growth.

As we saw in chapter 10, smartphone use and access to the Internet are increasing quickly across the planet. This means that people no longer need to be near a decent library or school to gain knowledge and improve their abilities. Globally, people are taking advantage of the skill-building opportunities of new technologies. This is the third reason that the spread of digital tools should make us optimistic about future growth: these tools are helping human capital grow quickly.

The free Duolingo app, for example, is now the world's most popular way to learn a second language. Of the nearly 15 billion Wikipedia page views during July of 2018, half were in languages other than English. Google's chief economist, Hal Varian, points out that hundreds of millions of how-to videos are viewed every day on YouTube, saying, "We never had a technology before that could educate such a broad group of people anytime on an as-needed basis for free."

Romer's work leaves me hopeful because it shows that it's our ability to build human capital, rather than chop down forests, dig mines, or burn fossil fuels that drives growth and prosperity. His model of how economies grow also reinforces how well capitalism and tech progress work together, which is a central point of this book. The surest way to boost profits is to cut costs, and modern technologies, especially digital ones, offer unlimited ways to combine and recombine materials—to swap, slim, optimize, and evaporate—in cost-reducing ways. There's no reason to expect that the two horsemen of capitalism and tech progress will stop riding together anytime soon. Quite the contrary. Romer's insights reveal that they're likely to gallop faster and farther as economies grow.

Our Brighter, Lighter Future

The world still has billions of desperately poor people, but they won't remain that way. All available evidence strongly suggests that most will become much wealthier in the years and decades ahead. As they earn more and consume more, what will be the impact on the planet?

The history and economics of the Industrial Era lead to pessimism on this important question. Resource use increased in lockstep with economic growth throughout the two centuries between James Watt's demonstration of his steam engine and the first Earth Day. Malthus and Jevons seemed to be right, and it was just a question of when, not if, we'd run up against the hard planetary limits to growth.

But in America and other rich countries something strange, unexpected, and wonderful happened: we started getting more from less. We decoupled population and economic growth from resource consumption, pollution, and other environmental harms. Malthus's and Jevons's ideas gave way to Romer's, and the world will never be the same.

This means that instead of worrying about the world's poor becoming richer, we should instead be helping them upgrade economically as much and as quickly as possible. Not only is it the morally correct thing to do, it's also the smart move for our planet. 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.

Transportation. Our current transportation systems are chronically inefficient. Most vehicles aren't used much of the time, and even when they’re in use, they're not nearly full. Now that we have technologies that let us know where every driver, passenger, piece of cargo, and vehicle is at all times, we can greatly increase the utilization and efficiency of every element of transportation.

Renting instead of owning transportation is a likely consequence of this shift. Instead of owning cars, which typically sit idle more than 90 percent of the time, more people will choose to access transportation as needed. We're already seeing this with car-hailing companies such as Uber and Lyft. These services are quickly spreading around the world, and expanding to cover more modes of transportation, from motorbikes to bicycles to electric scooters. They're also moving into commercial applications such as long- and short-haul trucking. As this shift continues, we’ll need fewer tons of steel, aluminum, plastic, gasoline, and other resources to move the world's people and goods around.

We might also experience less congestion and gridlock as we try to get around. Bikes and scooters take up little space compared to cars, so streets can accommodate many more of them. Technology also gives us the ability to implement many forms of "congestion pricing," which has been shown to reduce gridlock by making car access to busy streets expensive enough that people use other options. The most intriguing future transportation platform of all might be the sky. The same technologies that power today's small drones can be scaled up to build "air taxis" with as many as eight propellers and no pilot. Such contraptions sound like science fiction today, but they might be carrying us around by midcentury.

Agriculture. As we saw in chapter 5, leading farms have demonstrated an ability to increase their tonnage of output year after year while decreasing their use of inputs such as land, water, and fertilizer. This trend toward optimization will continue thanks to a set of innovations under the label precision agriculture. The precision comes from many sources, including better sensors of plant and animal health, soil quality and moisture, and so on; the ability to deliver fertilizer, pesticides, and water just where they're needed; and machinery that adapts itself to each plant or animal. All these varieties of precision will combine to allow traditional farms to generate more from less.

So will changes to the genomes of plants and animals. DNA modifications will increase disease and drought tolerance, expand where crops can be grown, and allow us to get more of what we want from each crop or herd. As we saw in chapter 9, they'll also allow us to take better care of vulnerable populations such as infants in poor countries by creating golden rice and other nutrition enhancers. We'll also be able to make much more precise and targeted genetic modifications thanks to a new crop of gene-editing tools that are large improvements over their more scattershot predecessors. Opposition to genetically modified organisms is fierce in some quarters, but isn't based on reason or science. This opposition will, one hopes, fade.

Throughout human history, just about all farming has been done in fields. For some crops, this is now changing. Agriculture has moved indoors, where parameters such as light, humidity, fertilizer, and even the composition of the atmosphere can be precisely monitored and controlled. In everything from urban buildings to shipping containers, crops are now being grown with progressively less labor and fewer material inputs. These completely contained farms will spread and help reduce the planetary footprint of our agriculture.

These examples aren't intended to be comprehensive, and I don't have precise estimates of how likely each innovation is, or when it's most likely to occur. I offer them only to indicate how broad and exciting are the possibilities offered by the two horsemen of capitalism and technological progress, and how they’ll continue to dematerialize our consumption and let us increase our prosperity while treading more lightly on our planet.