# 1NC

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#### International Relations is the royal science of empire – the aff engineers “sustainable warfare” through a mutating geopolitics of violence.

Grove ‘19

[Jarius, PoliSci at the University of Hawai’i. 2019. “Savage Ecology: War and Geopolitics in the Anthropocene.”] pat – ask me for the PDF!

Because I wanted this book to inspire curiosity beyond the boundaries of international relations (ir), I considered ignoring the field altogether, removing all mentions of ir or ir theory. However, upon closer reflection, I have decided to keep these references as I think they are relevant for those outside the discipline and for those who, like myself, often feel alienated within its disciplinary boundaries. In the former case, it is important to know that, unlike some more humble fields, ir has always held itself to be a kind of royal science. Scholarship in ir, particularly in the United States, is half research, and half biding time until you have the prince’s ear. The hallowed names in the mainstream of the field are still known because they somehow changed the behavior of their intended clients—those being states, militaries, and international organizations. Therefore, some attention to ir is necessary because it has an all-too-casual relationship with institutional power that directly impacts the lives of real people, and ir is all too often lethal theory. As an American discipline, the political economy of the field is impossible without Department of Defense money, and its semiotic economy would be equally dwarfed without contributory figures like Woodrow Wilson, Henry Kissinger, and Samuel Huntington. The ubiquity of Huntington’s “clash of civilizations” thesis and Kissinger’s particular brand of realpolitik are undeniable throughout the field, as well as the world. Each, in their own way, has saturated the watchwords and nomenclature of geopolitics from an American perspective so thoroughly that both political parties in the United States fight over who gets to claim the heritage of each. Although many other fields such as anthropology and even comparative literature have found themselves in the gravitational pull of geopolitics, international relations is meant to be scholarship as statecraft by other means. That is, ir was meant to improve the global order and ensure the place of its guarantor, the United States of America. Having spent the better part of a decade listening to national security analysts and diplomats from the United States, South Korea, Japan, Europe, China, Brazil, and Russia, as well as military strategists around the planet, I found their vocabulary and worldview strikingly homogeneous.

If this seems too general a claim, one should take a peek at John Mearsheimer’s essay “Benign Hegemony,” which defends the Americanness of the ir field. What is most telling in this essay is not a defense of the U.S. as a benign hegemonic power, which Mearsheimer has done at length elsewhere. Rather, it is his vigorous defense that as a field, ir theory has done well by the world in setting the intellectual agenda for global challenges, and for creating useful theoretical approaches to addressing those problems. For Mearsheimer, the proof that American scholarly hegemony has been benign is that there is nothing important that has been left out. A quick scan of the last ten or twenty International Studies Association conferences would suggest otherwise.

That issues like rape as a weapon of war, postcolonial violence, global racism, and climate change are not squarely in the main of ir demonstrates just how benign American scholarly hegemony is not. As one prominent anthropologist said to me at dinner after touring the isa conference in 2014, “it was surreal, like a tour through the Cold War. People were giving papers and arguing as if nothing had ever changed.” These same provincial scholars aspire and succeed at filling the advisory roles of each successive American presidency. One cannot help but see a connection between the history of the ir field, and the catastrophes of U.S. foreign policy during the twentieth and twenty-first centuries. One could repeat the words of the anthropologist I mentioned to describe the 2016 presidential campaign debates over the future of U.S. foreign policy: it is as if “nothing had ever changed.” And yet these old white men still strut around the halls of America’s “best” institutions as if they saved us from the Cold War, even as the planet crumbles under the weight of their failed imperial dreams.

If international relations was meant to be the science of making the world something other than what it would be if we were all left to our own worst devices, then it has failed monumentally. The United States is once again in fierce nuclear competition with Russia. We are no closer to any significant action on climate change. We have not met any of the Millennium Development Goals determined by the United Nations on eradicating poverty. War and security are the most significant financial, creative, social, cultural, technological, and political investments of almost every nation-state on Earth. The general intellect is a martial intellect.

Despite all this failure, pessimism does not exist in international relations, at least not on paper. The seething doom of our current predicament thrives at the conference bar and in hushed office conversations but not in our research. In public, the darkness disavowed possesses and inflames the petty cynicisms and hatreds that are often turned outward at tired and predictable scapegoats.

After the fury of three decades of critique, most ir scholars still camp out either on the hill of liberal internationalism or in the dark woods of political realism. Neither offers much that is new by way of answers or even explanations, and each dominant school has failed to account for our current apocalyptic condition. One is left wondering what it is exactly that they think they do. Despite the seeming opposition between the two, one idealistic about the future of international order (liberals) and the other self-satisfied with the tragedy of cycles of war and dominance (realists), both positions are optimists of the positivist variety.

For both warring parties, ir optimism is expressed through a romantic empiricism. For all those who toil away looking for the next theory of international politics, order is out there somewhere, and dutifully recording reality will find it—or at least bring us closer to its discovery. For liberal internationalism, this will bring the long-heralded maturity of Immanuel Kant’s perpetual peace. For second-order sociopaths known as offensive realists, crumbs of “useful strategic insight” and the endless details that amplify their epistemophilia for force projection and violence capability represent a potential “advantage,” that is, the possibility to move one step forward on the global political board game of snakes and ladders. Still, the cynicism of ir always creeps back in because the world never quite lives up to the empirical findings it is commanded to obey. Disappointment here is not without reason, but we cynically continue to make the same policy recommendations, catastrophe after catastrophe.

I have an idea about where ir’s recent malaise comes from. I think it is a moment, just before the awareness of the Anthropocene, after the Cold War and before September 11, when the end of everything was only a hypothetical problem for those of a certain coddled and privileged modern form of life. The catastrophe of the human predicament was that there was no catastrophe, no reason, no generation-defining challenge or war. Now the fate of this form of life is actually imperiled, and it is too much to bear. The weird denial of sexism, racism, climate change, the sixth extinction, and loose nukes, all by a field of scholars tasked with studying geopolitics, is more than irrationalism or ignorance. This animosity toward reality is a deep and corrosive nihilism, a denial of the world. Thus ir as a strategic field is demonstrative of a civilization with nothing left to do, nothing left to destroy. All that is left is to make meaning out of being incapable of undoing the world that Euro-American geopolitics created. Emo geopolitics is not pretty, but it is real. The letdown, the failure, the apocalypse-that-was-not finally arrived, and we are too late.

Still, the United States of America continues to follow the advice of “the best and the brightest,” testing the imperial waters, not quite ready to commit out loud to empire but completely unwilling to abandon it. Stuck in between, contemporary geopolitics—as curated by the United States—is in a permanent beta phase. Neuro-torture, algorithmic warfare, drone strikes, and cybernetic nation-building are not means or ends but rather are tests. Can a polis be engineered? Can the human operating system be reformatted? Can violence be modulated until legally invisible while all the more lethal? Each incursion, each new actor or actant, and new terrains from brains to transatlantic cables—all find themselves part of a grand experiment to see if a benign or at least sustainable empire is possible. There is no seeming regard for the fact that each experiment directly competes with Thomas Jefferson’s democratic experiment. One wonders if freedom can even exist anywhere other than temporarily on the fringe of some neglected order. Is this some metaphysical condition of freedom, or is the world so supersaturated with martial orders that the ragged edges between imperial orders are all that we have left? It feels like freedom’s remains persist only in the ruins of everything else. No space is left that can be truly indifferent to the law, security, or economy. Such is the new life of a human in debt. The social contract has been refinanced as what is owed and nothing more: politics without equity. Inequity without equality.

What about the impending collapse of the post–World War II order, the self-destruction of the United States, the rise of China and a new world order? If humanity lasts long enough for China to put its stamp on the human apocalypse, I will write a new introduction. Until then, we live in the death rattle of Pax Americana. While I think the totality of this claim is true, I do not want to rule out that many of us throughout the world still make lives otherwise. Many of us even thrive in spite of it all. And yet, no form of life can be made that escapes the fact that everything can come to a sudden and arbitrary end thanks to the whim of an American drone operator, nuclear catastrophe, or macroeconomic manipulation like sanctions. There are other ways to die and other organized forms of killing outside the control of the United States; however, no other single apparatus can make everyone or anyone die irrespective of citizenship or geographic location. For me, this is the most inescapable philosophical provocation of our moment in time.

The haphazard and seemingly limitless nature of U.S. violence means that even the core principles of the great political realist concepts like order and national interest are being displaced by subterranean violence entrepreneurs that populate transversal battlefields, security corridors, and border zones. Mercenaries, drug lords, chief executive officers, presidents, and sports commissioners are more alike than ever. Doomsayers like Paul Virilio, Lewis Mumford, and Martin Heidegger foretold a kind of terminal and self-annihilating velocity for geopolitics’ technological saturation, but even their lack of imagination appears optimistic. American geopolitics does not know totality or finality; it bleeds, mutates, and reforms. Furthermore, the peril of biopolitics seems now almost romantic. To make life live? Perchance to dream. The care and concern for life’s productivity is increasingly subsumed by plasticity—forming and reforming without regard to the telos of productivity, division, or normative order.

There are, of course, still orders in our geoplastic age, but they are almost unrecognizable as such. When so many citizens and states are directly invested in sabotaging publicly stated strategic ends, then concepts like national interest seem equally quaint. We are witnessing creative and horrifying experiments in the affirmative production of dying, which also deprive those targeted and in some cases whole populations from the relief of death. To follow Rucker, I want to try to see the world for what it is. We can only say that tragedy is no longer a genre of geopolitics. Tragedy redeems. The occluded character of contemporary geopolitics shoehorned into experience produces the feeling that there is no relief, no reason, no victory, no defeats, and no exit within the confines of national security’s constricted world. This is not tragedy: it is horror. We live in an age of horror that, like the victims of gore movies who never quite die so that they can be tortured more, furthers our practice of collective violence and goes on for decades as a kind of sustainable warfare.

#### The aff’s managerial concerns over space debris is techno-sustainability – liberal governance over space as a “commons” is the exclusive domain of space-faring nations

Stroikos ‘16

[Dimitrios, University of York. 2016. “China, India in Space and the Orbit of International Society: Power, Status, and Order on the High Frontier.”] Pat

Moreover, it is necessary to briefly say something about how techno-nationalism as a primary institution interacts with some of the other institutions of international space society. First, in many ways, techno-nationalism is complimentary to sovereign statehood because sovereignty in space is largely embedded in cosmopolitan and solidarist conceptions. This is partly why highly visible space projects define spacefaring hierarchies. Second, and consequently, techno-nationalism is also closely linked to great power status and great power management in the sense that different space capabilities also confer different levels of status and responsibilities in the management of international order in space. Likewise, in relation to diplomacy, highly visible techno-nationalist space feats can also offer a seat at the table of diplomatic initiatives and negotiations. Seen in this light, ‘high-visibility’ projects, such as space programmes are part of ‘recognition games’, which states play in order to acquire the status of a great power (Suzuki, 2008). As Cunningham (2009: 74) notes, ‘to be a superpower, one must be a “spacefaring” nation’. The Space Market Arguably, the economic factor has been one of the most neglected issues in the English School literature. Discussing some of the shortcomings of Bull’s work, Miller (1990: 74) pointed out in 1990, ‘a basic criticism of Bull’s account of international society’ is ‘that it does not include a strong economic component’ dealing with rules regarding trade, navigation, and investment and the common interests that permeate the sphere of economic activities. Since then, some important work has been done to bring together the economic sector and the English School, especially in the context of globalisation (Buzan, 2004; Buzan, 2005; Hurrell, 2007: 194-215). However, the question of how to consider the economic sector within the English School remains rather underdeveloped. According to Buzan, one response is to treat capitalism as a master institution, but he prefers the use of the market as a more neutral term, which has the additional merit of encompassing other practices, such as trade (Buzan, 2004: 193-4, Buzan, 2014a: 136). Consequently, given the growing globalisation and commercialisation of space activities (OECD, 2014: 9-10), there are good reasons for considering the space market as an emerging primary institution of international space society. Significantly, in some ways, since the advent of the Space Age, the space market has followed a parallel trajectory to the market as a distinctive institution at the global level. In particular, although the market was a key primary institution of the Western global international society during much of the Cold War, it has emerged as a sort of a global institution in the post-Cold War era (Buzan, 2014a: 138). Likewise, the space market was initially confined to American-led space activities, beginning as a US government initiative with the Communications Satellite Act in 1962, which led to the creation of the International Telecommunications Satellite Consortium (Intelsat) in 1964 (Moltz, 2014: 94). However, during the early Cold War, commercial activities were largely limited to the field of satellite communications and even commercial transatlantic cooperation in space was determined to a large extent by political and strategic factors and technology transfer considerations (Krige, 2013b). Equally, the idea of the commercialisation of space remained contested not the least because of the opposition of the Soviet Union and communist China to the market in general. This began to change only in the 1980s, when a number of space players emerged, including Europe and Japan, that challenged the US leadership in the fields of satellite manufacturing, launching capability, and other commercial space services. It was also during this period that the Soviet Union and China became less reluctant to get involved with commercial space activities (Krige, 2013a: 16-7). But it was after the end of the Cold War that the globalisation and commercialisation of space activities gradually led to the emergence of a global space market, which points to its inclusion as a primary institution of the international space society. According to a recent report by the Space Foundation (2015: 2), the global space economy grew up by 9 percent in 2014, totalling $330 billion, with commercial space activities accounting for the 76 percent of the global space economy and direct-to-home television services accounting for more than three-quarters of the commercial space sector. Even in the launch field, which has been traditionally reserved to the state largely due to national security and cost considerations, US small private companies have emerged like Space Exploration Technologies Corporation, known as SpaceX, and XCOR Aerospace. As Newlove-Eriksson and Eriksson (2013) argue, the globalisation of space activities has been underpinned by the growing importance of private authority and transnational Public-Private Partnerships (PPPs) and the blurred distinction between the military and civilian uses of space. Therefore, it makes sense to think of the space market as an institution of international space society. Yet, a number of points are worth noting here as they help to highlight the possibilities and limits of this move. First, despite all the attention paid to the privatisation of space travel promoted by space entrepreneurs of the likes of Elon Musk (SpaceX), Jeff Bezos (Blue Origin), and Richard Branson (Virgin Galactic), the privatisation of space should not be overstated. Not only does the degree of privatisation vary across space services and products (Moltz, 2014: 102-12), but governments also remain central actors in the space industry as key sources of initial investment and as customers for several space products and services (Brennan and Vecchi, 2011: 18, OECD, 2014: 17). Second, while it is clear that the argument over whether to have the market or not ended with the collapse of the Soviet Union, the tension between economic nationalism and economic liberalism is far from over, as there are not many states fully open to the forces of the global economy and many states support a form of capitalism that is embedded in economic nationalism. This points to the contested nature of the market as a primary institution in the sense that for many states the challenge of how to relate to the global market and make it more effective remains (Buzan, 2014a: 138). As far as international space society is concerned, it is necessary to note that the contested nature of the space market as an institution is reflected in the continuing dialectics between techno-nationalism and techno-globalism. It is commonplace among scholars to argue that Japan and China are two key examples of states that privilege a techno-nationalist approach to technology and innovation, including space technology. But even the United States has not been immune to techno-nationalist impulses. As Weiss (2014) shows, the enduring lead in high technology that the United States still enjoys is largely explained by the creation of not a liberal, but a hybrid political economy, whereby the national security state is interwoven with the commercial sector. NASA, of course, has been a key institution of the national security state since the beginning of the Space Age. But this has also been manifested in its recent efforts to catalyse the development of a commercial space industry through inviting competitive innovation (Weiss, 2014: 119-20, 27-8). This leads to the third point to make about how to understand the relationship between techno-nationalism and the space market. Because of the enduring influence of the former, it is tempting to see techno-nationalism as containing the space market (at least for the time being). Clearly, at one level, the space market can be understood as complementary to techno-nationalism in the ever-globalising international space society. Yet, at another level, the space market as a solidarist institution is staged as opposed to techno-nationalism. This tension is compounded by the fact that, in many ways, techno-nationalism occupies the crucial place of national sovereignty and territoriality in the sector of space considering that sovereignty in international space society is largely understood in cosmopolitan terms. Fourth, in discussing the market as a primary institution, Beeson and Breslin (2014) suggest that it makes more sense to treat the ‘developmental state’ and ‘regional production structures’ as primary institutions in East Asia rather than focusing on the market. This is an important consideration that serves to highlight how the global political economy is underpinned by significant regional derivations. Following from this, although it is apparent that the space market is a key feature of the social structure of international space society, it is possible to say that there are significant regional derivations. Perhaps the best expression of this is the Chinese and Indian variants of postcolonial techno-nationalism that still shape how the two rising Asian space powers relate to the space market. In light of the above, for now, it seems that there is some sort of hierarchy between techno-nationalism and the space market with the former subsuming the latter, especially with regards to space programmes in a postcolonial context. Certainly, the integration of China and India into the global space economy has accelerated over the last decades, but, as we shall see, techno-nationalism is still prominent in the ways in which the two Asian space powers approach space technology. Moreover, the space market remains contested as an emerging institution due to the ambiguity embedded in space law regarding space activities carried on by private actors. This process is further complicated by the inherent dual-use nature of space technology and the blurring of the distinction between the private and public realms (Newlove-Eriksson and Eriksson 2013). Environmental Stewardship There is now a burgeoning literature that deals with the relationship between international society and global environmentalism and assesses the extent to which environmental stewardship can be seen as a nascent institution of international society. Recent efforts to find ways to mitigate space debris as well as to create a normative framework for the sustainability of space are illustrative of how environmental stewardship is gradually becoming an institution in space. For example, in 2007, COPUOS adopted the ‘Space Debris Mitigation Guidelines’, which were wrought by the international Inter-Agency Debris Coordination Committee (IADC), consisting of experts from thirteen space agencies (United Nations Office for Outer Space Affairs, 2010). Moreover, as discussed earlier, in 2010, COPUOS formed the Working Group on the Long-term Sustainability of Outer Space Activities. Notably, the European Union proposal for a Code of Conduct for Outer Space also includes provisions on space debris control and mitigation (Council of the European Union, 2008: 9; Dickow, 2009: 159). Thus, there are grounds for considering environmental stewardship as an emerging institution of international space society. Indeed, the growing number of governments, private firms, and non-state actors that emphasise the importance of the sustainable utilisation of space suggests that space sustainability has emerged as a key norm. However, what should be noted is that these developments reflect a more pragmatic approach to maintain the space environment sustainable for the effective use of space rather than an expression of cosmopolitan values. Consequently, in the subsequent chapters, rather than examining in detail the engagement of China and India with environmental stewardship as a nascent institution in space, the focus will be on the emerging norm of space sustainability as a key great power responsibility in managing international space order and the implications of this development for China and India as aspiring great powers. Concluding Remarks Although it is clear that there are a number of ways of understanding the international politics of space, it may be worth going beyond standard theoretical approaches to understand how order is maintained in space. Drawing on key English School concepts, this chapter suggests that it is possible to conceptualise space not merely as a system, but also as an international society with a distinct social structure. This exercise of concept development is important both analytically and hermeneutically, given the notion of an exclusive club of space-faring countries. The chapter developed this argument further by highlighting how the nature of outer space as a distinctive sectoral interstate society is manifested in the ways in which its primary institutions are differentiated from such institutions at the global level (space war, space law, cosmopolitan sovereignty, space diplomacy, balance of power, great power management, techno-nationalism, space market, and environmental stewardship) in a historical and comparative context. In doing so, the chapter helps to highlight the constitutive impact of these institutions on the norms that shape the behaviour of the space-faring states.

#### The hegemonic pursuit of nuclear superiority and miscalc reduction, ironically, makes miscalc all the more likely

Bosquet and Grove 20. Antoine Bosquet and Jairus Grove, 2020, “The best of all possible nuclear worlds (or how Matthew Kroenig learned to stop worrying and love the bomb),” New Perspectives, <https://journals.sagepub.com/doi/pdf/10.1177/2336825X20908461> sean!

Underlying the entire book is an insistence on the rational character of the ‘logic’ of American nuclear strategy that steadfastly holds at arm’s length the possibility of a much more messy and terrifying reality. Kroenig writes that ‘any serious analysis of nuclear strategy must begin by looking straight into the abyss of nuclear catastrophe. Few do’ (2018: 39). Yet does Kroenig really do so himself? Or does he rather take refuge in the prophylactic of apodictic reason? Only in a world where the munificent providence of reason is sovereign over the possibility of miscalculations, accidents and self-fulfilling security dilemmas can one ignore how the aggressive pursuit of nuclear superiority by Washington will induce a state of fearful vulnerability in Moscow and Beijing and with it corresponding counter-measures. We need not speculate about how this will play out; history provides us with all the evidence we require. During the Cold War, fear of a ‘bolt from the blue’ attack that would ‘decapitate’ its civilian leadership or gravely deplete its second-strike capability prompted the United States to move towards a ‘launch-on-warning’ policy. Such a posture mandated a retaliatory strike as soon as enemy missiles were detected in the air rather than when they had begun landing. This potentially left policymakers with less than 15 minutes to decide on an order to launch their nuclear arsenal and seal the fate of millions. Considered alongside the well-documented fallibility of early warning systems, the unfathomable pressure placed on a decision maker in such a scenario has led many analysts to identify a frightful risk of accidental nuclear war in such a policy (Blair, 1993).1 Today, there remains considerable ambiguity surrounding the precise posture of either the United States or Russia in this area. What cannot be doubted, however, is that a situation of marked nuclear superiority by one side would greatly incentivise the other to place its forces on a hairtrigger alert in a bid to buttress its deterrent. The other rational course of action for an adversary unable to keep up with the development of a high-precision counterforce arsenal is to move towards a policy of indiscriminate nuclear targeting. As Raymond Aron (1965: 259) astutely observed, ‘each doctrine breeds its dialectical antithesis in the thinking of the opponent’. Thus Russia has pointedly let it be known since 2015 that it is developing a nuclear torpedo that revives the Cold War weapon design of the cobalt bomb so as to produce large amounts of radioactive fallout that would contaminate wide areas of the North American coastline for decades (BBC News, 2015). Whether this weapon system actually exists or not at present – and the usual caveats apply here – the signal being sent by Moscow is clear. If the United States pursues a policy of nuclear superiority through a new generation of highprecision weapons that could disarm Russia in a first strike, the logical deterrent response is to make its own weapons as dirty and indiscriminate as possible. This is the very same implacable logic underlying the ‘doomsday machine’ imagined by Leo Szilard and Herman Kahn and later famously satirised in Dr Strangelove. 2 It is now well established that the Soviets assembled in the 1980s a nuclear command and control system equipped with a highly automated capability known as Dead Hand that would ensure retaliation in the event that the country’s leadership was incapacitated (Hoffman, 2009). While it seems that plans for full automation were never adopted and that some degree of human oversight was always maintained, the underlying pressure that gave rise to such designs remains. Indeed, widely touted technological developments are likely to only ratchet it up again. Hypersonic delivery vehicles flying at up to 20 times the speed of sound (Smith, 2019), space-based weapons capable of taking out early warning satellites (Rogoway, 2018) and stealth cruise missiles less vulnerable to radar detection (Wesigerber, 2019) all threaten to compress decision time further. Rapid advances in artificial intelligence are simultaneously giving new impetus to schemes for automation, even prompting some commentators to advocate unironically the adoption of an ‘American Dead Hand’ (Lowther and McGiffin, 2019). Faced with the acceleration of our weapon systems and shrinking window of human agency, we cannot but be reminded of Paul Virilio’s foreboding warning of the ‘total accident’ ‘gestating within the acquisition of absolute speed’ (Virilio and Armitage, 2001: 146). It is not the case that Kroenig wholly neglects the issue of accidental war, however. Indeed, it is actually central to his conception of brinksmanship. He allows early on that ‘nuclear war is not entirely in the collective control of the participants, but could result from accident or inadvertent escalation’ and that, since nuclear war is so devastating that the threat of its deliberate initiation generally lacks credibility, states can only threaten to increase its risk through exercises in brinksmanship ‘that could spiral out of control and result in catastrophe’ (2018: 20). In sum, it is the very possibility of accident that makes nuclear brinksmanship practicable with the upper hand accruing to the side that has the least to lose from its eventuality. Yet incredibly, having established that accidental war is the most likely scenario for a nuclear exchange, Kroenig subsequently pays no attention to this problem despite the fact the brinkmanship he endorses evidently increases its probability for all the reasons mentioned above. What sense to give to such an apparently breezy negligence for the dangers attendant to the pursuit of nuclear supremacy? Is it that Kroenig is reconciled with the eventual failure of deterrence so long as American superiority ensures it comes out at the happier end of the ‘meaningful variation in the expected cost of nuclear war’ (2018: 16)? Bernard Brodie’s sardonic observation that ‘whether the survivors be many or few, in the midst of a land scarred and ruined beyond all present comprehension, they should not be expected to show much concern for the further pursuit of political-military objectives’ would seem here apposite for anyone tempted to strategise beyond such a cataclysm (Brodie 1957: 1118). Yet rather than attribute such callousness to him, we privilege here the hypothesis that Kroenig radically underestimates nuclear risk, ultimately underpinned by little more than faith in the metaphysical providence of a rational world. While Kroenig theoretically acknowledges the possibility that a brinkmanship crisis will end in ‘disaster’, the scant regard he affords to that eventuality along with his wilful neglect of the variables that might precipitate such an event suggest an unwavering confidence in the constancy of rational decision-making and the reliable de-escalation of such crises through a sober recognition by all parties of their respective stakes and vulnerabilities. It is on that basis that he can advocate a policy of nuclear superiority for the ‘coercive advantage’ it provides, thereby implicitly making the case for wielding such advantage in future games of nuclear chicken made all the more alluring for the seeming certainty of outcome promised. Indeed, we encounter throughout the book a markedly one-sided assessment of nuclear risk in which the compelling logic of deterrence trumps every time alarmist fears about the costs and perils of a hawkish nuclear posture. Yet when it really comes down to it, Kroenig’s ultimate objection to the suggested downside risks of ‘upsetting strategic stability, provoking unwinnable arms races, fueling nuclear proliferation, and draining the defense budget’ is the very fact of the United States’ pursuit of nuclear advantage (2018: 190). Quite simply, if such a policy was not rationally beneficial, why would a rational state have persisted with it? It is at this point that we glimpse the tautology at the heart of Kroenig’s argumentation. Nuclear superiority is rational because it is pursued by a rational state. And why is the United States rational? Because the United States pursues nuclear superiority. The pathology of power There is of course another explanation. In his book The Nerves of Government, Karl Deutsch (1963) identifies what he calls the pathology of power. According to Deutsch, the amassing of material power allows states to absorb mistakes rather than learn from them. The more powerful a state becomes, the less likely it is to be compelled to learn from its errors. When asymmetries in power become extreme (e.g. the post-Cold War unipolar moment), states risk becoming increasingly disconnected from their environmental awareness – their capacity to learn – and making decisions based solely on the recursively solipsistic thinking that takes place in the windowless silos of scenario planners that more and more resemble the perverse nuclear clergy of Beneath the Planet of the Apes. Could any theory more adequately account for the lethal foreign policy blunders of the United States in the last 60 years? In the case of nuclear strategy, the imbalance is even starker. Despite hundreds of nuclear accidents (Schlosser, 2014), a few severe near-miss geopolitical crises, and the squandering of the post-Cold War moment, the United States to date has not incurred any significant costs for its mistakes and oversights. However, in the high stakes game of nuclear risk, an N of 1 can change the data set radically. Unlike conventional wars, a nuclear war, even one, would reverse every single statistical inference. And then would we learn? Or would the survivors be too busy envying the dead to care? The tragedy of misplaced confidence, strategic miscalculation and epistemological hubris premised on absence of evidence rather than evidence of absence is that the learning curve facing us is not merely steep but potentially fatal. While the short-term benefits of nuclear superiority to the United States can certainly be substantiated with empirical evidence, which Kroenig does aptly, a different perspective opens up when one extends the temporal horizon of possibility. Let us allow that Kroenig is right about the gains his strategic recommendation can make in the next 5 years. Maybe good fortune grants these gains again for another decade. How about the next 50 years? Or 100? Projecting policy recommendations into the speculative realm of the next century may seem absurd until you consider how Kroenig’s argument forecloses any possibility, much less desirability, of nuclear reductions or relinquishment of first use, let alone wholesale disarmament. Seventy-five years on from the first uses of atomic weaponry in war, we must surely count ourselves immensely fortunate to not have experienced a subsequent, and almost certainly more calamitous, recurrence to date. Appeals to the self-preservation of states and the adoption of deterrent strategies have no doubt played their part in this but without thereby lifting the terrible Sword of Damocles suspended above all our heads. To find The Logic of American Nuclear Strategy compelling as a salutary guide for policy, rather than as an academic pitch to contemporary politicians and generals already committed to nuclear superiority, requires a faith in nuclear providentialism and commitment to making of our grim predicament a virtue we simply do not share. For the language of inductive reason and dispassionate consideration of data is betrayed by an evangelical zeal for a world of cheap hegemony – supremacy without the inconvenience and blood sacrifice of having to fight for it. Nuclear superiority is the pallid dream of domination on the back of hypothetical annihilation, a bluff leveraged on planetary life as we know it. One can only imagine such a gamble can be taken when the possibility of losing it is not ever seriously considered, a wager resting on the obdurate conviction that ours will forever be the best of all possible nuclear worlds.

#### Voting negative adopts failed IR for a healthy dose of pessimism – at the end of the world, all we can do is hope to be buried alive together.

Grove ‘19

[Jarius, PoliSci at the University of Hawai’i. 2019. “Savage Ecology: War and Geopolitics in the Anthropocene.”] pat – ask me for the PDF!

Failed ir affirms the power of this kind of negative thinking as an alternative to the endless rehearsing of moralizing insights and strategic foresight. The negative is not “against” or reacting to something. Rather, it is the affirmation of a freedom beyond the limits of life and death. That is, it is making a life by continuing to think about the world, even if that thinking is not recuperative, and even if nothing we think can save us. In the face of it all, one celebrates useless thinking, useless scholarship, and useless forms of life at the very moment we are told to throw them all under the bus in the name of survival at all costs. This is a logic referred to lately as hope and it is as cruel as it is anxiety inducing. Hope is a form of extortion. We are told that it is our obligation to bear the weight of making things better while being chided that the failure of our efforts is the result of not believing in the possibility of real change. In such an environment, pessimism is often treated as a form of treason, as if only neoliberals and moral degenerates give up—or so goes the op-ed’s insisting upon the renewed possibility of redemption.

In response to these exhortations, pessimism offers a historical atheism, both methodologically and morally. The universe does not bend toward justice. Sometimes the universe bends toward the indifference of gravity wells and black holes. Affirming negativity, inspired by Achille Mbembe, is grounds for freedom, even if that freedom or relief is only fleeting and always insecure. I am not arrogant enough to think a book can attain freedom of this sort, but this book is inspired by refusals of critique as redemption in favor of useless critique and critique for its own sake.

That the pursuit of knowledge without immediate application is so thoroughly useless, even profane, is a diagnosis of our current moment. The neoliberal assault on the university is evidence of this condition, as is the current pitch of American politics. Our indifference as intellectuals to maximizing value has not gone unnoticed. We are still dangerous, worthy of vilification, of attack, sabotage, and derision because we fail so decadently. We are parasites according to Scott Walker, Donald Trump, and the rest. So be it. We are and shall remain irascible irritants to a worldwide assault on thinking that is well underway and facing few obstacles in other jurisdictions.

What would failed scholarship do? Learn to die, learn to live, learn to listen, learn to be together, and learn to be generous. These virtues are useless in that they do not prevent or manage things. They do not translate into learning objectives or metrics. Virtues of this order are selfsame, nontransferable experiences. They are meaningful but not useful. These are luxurious virtues. Like grieving or joy, they are ends unto themselves. But how will these ideas seek extramural grants, contribute to an outcomes-based education system, or become a policy recommendation? They will not, and that is part of their virtue.

Even if there is no straight line to where we are and where we ought to be, I think we should get over the idea that somehow the U.S. project of liberal empire is conflicted, or “more right than it is wrong,” or pragmatically preferable to the alternatives. I hope this book can contribute to the urgent necessity to get out of the way by reveling in the catastrophic failure that should inspire humility but instead seems to embolden too many to seek global control yet again. Demolition may be an affirmative act if it means insurgents and others can be better heard. And yet this may fail too. If we can accomplish nothing at all, we can at least, as Ta-Nehisi Coates and other pessimists have said, refuse to suborn the lie of America any longer. Telling the truth, even if it cannot change the outcome of history, is a certain kind of solace. In Coates’s words, there is a kind of rapture “when you can no longer be lied to, when you have rejected the dream.” Saying the truth out loud brings with it the relief that we are not crazy. Things really are as bad as we think.

If there are those of us who want to break from this one-hundred-year-old race to be the next Henry Kissinger, then why do we continue to seek respect in the form of recognizable standards of excellence? I am not sure where the answer finally lies, but I do know that professionalization will not save us. To appear as normal and recognizably rigorous will not be enough to stave off the neoliberal drive to monetize scholarship, or to demand of us strategically useful insights. The least we can do in the face of such a battle is to find comfort in meaningful ideas and the friendships they build rather than try to perform for those we know are the problem. Some will ask, who is this “we” or is that “they”—where is your evidence? More will know exactly what I am talking about.

The virtues I seek are oriented toward an academy of refuge, a place we can still live, no matter how dire the conditions of the university and the classroom. It is not the think tank, boardroom, or command center. We are, those of us who wish to be included, the last of the philosophers, the last of the lovers of knowledge, the deviants who should revel in what Harney and Moten have called the undercommons.

In one of his final lectures, Bataille speaks of the remnants of a different human species, something not quite so doomed, something that wasted its newly discovered consciousness and tool-being on the art that still marks the walls of prehistoric caves. This lingering minor or vestigial heritage is philosophy’s beginning. Philosophy survives war, atrocity, famine, and crusades. Thinking matters in a very unusual way. Thinking is not power or emancipation. Thinking matters for a sense of belonging to the world, and for believing in the fecundity of the world despite evidence to the contrary.

How do you get all this from pessimism, from failure? Because willing failure is a temptation, a lure to think otherwise, to think dangerous thoughts. Pessimism is a threat to indifferentism and nihilism in the sense of the phenomenon of Donald Trump. Pessimism is a provocation and an enemy of skepticism, particularly of the metaphysical variety. It is not redemption from these afflictions, but in pessimism there is solace in the real. To put it another way, to study the world as it is means to care for it.

The exhortation that our care or interest should be contingent on how useful the world is and how much of it conforms to our designs is as much opposed to care as it is to empiricism. We can study airports, poetry, endurance races, borders, bombs, plastic, and warfare, and find them all in the world. To consider the depth of their existence can be an invitation to the world rather than a prelude to another policy report. One cannot make a successful political career out of such pursuits, but you might be able to make a life out of it, a life worth repeating even if nothing else happens.

At the end of Jack Halberstam’s The Queer Art of Failure, we are presented with the Fantastic Mr. Fox’s toast as an exemple of something meaningful in these dark times of ours.

They say all foxes are slightly allergic to linoleum, but it’s cool to the paw—try it. They say my tail needs to be dry cleaned twice a month, but now it’s fully detachable—see? They say our tree may never grow back, but one day, something will. Yes, these crackles are made of synthetic goose and these giblets come from artificial squab and even these apples look fake—but at least they’ve got stars on them. I guess my point is, we’ll eat tonight, and we’ll eat together. And even in this not particularly flattering light, you are without a doubt the five and a half most wonderful wild animals I’ve ever met in my life. So let’s raise our boxes—to our survival.

Halberstam says of this queer moment:

Not quite a credo, something short of a toast, a little less than a speech, but Mr. Fox gives here one of the best and most moving—both emotionally and in stop-motion terms—addresses in the history of cinema. Unlike Coraline, where survival is predicated upon a rejection of the theatrical, the queer, and the improvised, and like Where the Wild Things Are, where the disappointment of deliverance must be leavened with the pragmatism of possibility, Fantastic Mr. Fox is a queerly animated classic in that it teaches us, as Finding Nemo, Chicken Run, and so many other revolting animations before it, to believe in detachable tails, fake apples, eating together, adapting to the lighting, risk, sissy sons, and the sheer importance of survival for all those wild souls that the farmers, the teachers, the preachers, and the politicians would like to bury alive.

Although not as much fun as Halberstam’s monument to low theory, Savage Ecology is for all the other wild animals out there studying global politics. May we be buried alive together.

#### The Role of the Judge is to adopt martial empiricism.

Bousquet et al ‘20

[Antoine Bousquet, University of London, Jairus Grove, University of Hawai‘i at Manoa, and Nisha Shah University of Ottawa. 2020. “Becoming war: Towards a martial empiricism,” <https://journals.sagepub.com/doi/full/10.1177/0967010619895660>] pat

Haunting the formations and deformations of global life, war confronts us as an abyss in the face of which cherished interpretative frameworks perilously buckle and warp. Indeed, Tarak Barkawi and Shane Brighton (2011: 129) accurately identify a ‘conceptual black hole surrounding the notion of war’ that has insistently gnawed at the study of the phenomenon. Locating the source of this lacuna in the absence of an ‘ontology of war’, they propose to ground one in ‘fighting’ (Barkawi and Brighton, 2011: 136). Although we concur on the diagnosis, we take issue with the suggested remedy. War does not obey any neat philosophical division between epistemology and ontology. For us, the resolute elusiveness of any definitive understanding of war is inherent in that very object. Every attempt to conceptually shackle war is undone by the creative advance of its new modes, residences and intensities. This speaks against the value of ontology per se less than it calls for a strange, paradoxical and provisional ontology that is consonant with the confounding mutability of war. Such an ontology, suspended between infinity and totality, being and nothingness, the sheer fecundity and utter catastrophe of war, may not be too uncanny for its object. In fairness, Barkawi and Brighton (2011: 133) gesture towards this in acknowledging ‘war’s recalcitrance as an object of knowledge’ and allowing for war to unmake any truth. Yet they seem unwilling to embrace the full force of their own insight, which Marc von Boemcken (2016: 239) ultimately declares: ‘even the statement that “war is fighting” may well be eventually undone by war. In a very fundamental manner, war escapes human intelligibility.’

This special issue on ‘Becoming War’ grapples with war as obdurate mystery. In its recurring persistence yet constant reinvention, its paradoxical ordering of life for the generation of death, or its stubborn affront to the better world we all purport to want, war never ceases to perplex us. Our world is one shot through by war, manifest in the nation-states we inhabit, the ecologies of technics that bind us to one another, and the very thoughts ricocheting through our communities of sense. And yet we still do not know war.

Rather than endeavour yet again to ‘say something fundamental about what war is’ (Barkawi and Brighton, 2011: 134, emphasis in original), we choose to explore how war becomes. This is not to say that we deny any durability or regularities in the phenomenon of war over time. Simply that, as Alfred Whitehead (1978: 35) puts it, ‘there is a becoming of continuity, but no continuity of becoming’. Accordingly, we seek to trace the lines of becoming that congeal into what comes to count as war, even as it continually frays at the edges and insolently defies habituated frames of reference. We do not, therefore, offer a theory of continuity, a formula for what all lines of becoming war might have in common, but instead sketch a style of investigation that encompasses both the enduring cohesion and the radical dispersion of war. We call this endeavour ‘martial empiricism’ to renounce attempts to devise a definitive theory of war. Instead, we favour an open-ended conceptual arsenal for following the trail of war wherever it leads us, as opposed to camping in the places where we already expect to find it.

Although we do not aim to circumscribe the remit of its investigations, martial empiricism is nonetheless inherently situational, spurred by the impulse to grasp the present martial condition we inhabit in all its calamity and promise. We would be far from the first to point out the growing inadequacy of the conceptual frameworks of war inherited from the Westphalian historical interval. Yet we still collectively flounder in the face of a combined and uneven landscape of armed conflict populated by metastasizing war machines encompassing overseas contingency operations, fullspectrum hybrid theatres, ethno-supremacist militias, crowd-sourced paramilitaries, Incel shooters and narco-state assassins. The game is definitely up when a task force led by the former head of United States Central Command can write that ‘basic categories such as “battlefield,” “combatant” and “hostilities” no longer have clear or stable meaning’ (Abizaid and Brooks, 2014: 35). Confronted with this reality and the persistent bewilderment it induces, we contend that a certain epistemic humility is in order. Rather than professing to know where war begins and ends, martial empiricism starts in the middle, with only the barest tentative intuitions necessary to explore the logistics, operations and embodiments that engender armed conflict as an unremitting condition of global life.

## Case

### 1NC – Util

#### Utilitarian calculus doesn’t account for the geopolitical structure of aggregate conceptions of the good – that makes it incapable of grappling with the causes of apocalypse.

Grove ‘19

[Jarius, PoliSci at the University of Hawai’i. 2019. “Savage Ecology: War and Geopolitics in the Anthropocene.”] pat – ask me for the PDF!

Rather than see these two career trajectories as opposed, I think Crutzen’s thinking displays a continuous concern for the Northern Hemisphere and a particular cartography, rather than a geography, of human survival. Crutzen, as well as the concept of the Anthropocene itself, cannot escape preceding geopolitical conceptions of the Earth. Crutzen and others who rush so quickly to the necessity to transition efforts from climate abatement to climate modification are unsurprisingly not moved by claims that artificial cooling will likely cause droughts and famines in the tropics and subtropical zones of the global south; nor are they moved by how such plans may accelerate ocean acidification. The utilitarian risk calculus that favors the greatest good for the greatest number has no geographical or historical sensibility of how unequally aggregate conceptions of the good are distributed around the planet.

Global thinking, even in its scientific and seemingly universalist claims to an atmosphere that “we” all share, belies the geopolitics that enlivens scientific concern, as well as the global public policy agenda of geoengineering that seeks to act on behalf of it. Saving humanity as an aggregate, whether from nuclear war, Styrofoam, or climate turbulence, has never meant an egalitarian distribution of survivors and sacrifices. Instead, our new cosmopolitanism—the global environment—follows almost exactly the drawn lines, that is, the cartography or racialized and selective solidarities and zones of indifference that characterize economic development, the selective application of combat, and, before that, the zones of settlement and colonization. More than a result of contemporary white supremacy or lingering white privilege, the territorialization of who lives and who dies, who matters and who must be left behind for the sake of humanity, represents a five-hundred-year geopolitical tradition of conquest, colonization, extraction, and the martial forms of life that made them all possible through war and through more subtle and languid forms of organized killing.

I am not suggesting that Crutzen and others are part of a vast conspiracy; rather, I want to outline how climate change, species loss, slavery, the elimination of native peoples, and the globalization of extractive capitalism are all part of the same global ordering. That is, all of these crises are geopolitical. The particular geopolitical arrangement of what others have called the longue durée, and what I am calling the Eurocene, is geologically significant but is not universally part of “human activity” despite the false syllogism at the heart of popular ecological thinking that a global threat to humanity must be shared in cause and crisis by all of humanity.

Departing from Sloterdijk, I am hesitant to so easily locate modernity or explication as the root or cause of the global catastrophe. No single strategy, war, act of colonization, technological breakthrough, or worldview fully explains the apocalypse before us. However, there is something like what Gilles Deleuze and Félix Guattari call a refrain that holds the vast assemblage together, a geopolitical melody hummed along with the global expansion of a form of life characterized by homogenization rather than diversification. Accordingly, if we are to make some sense of such a vast world that is, even for Crutzen and Birks, “quite complex and difficult to model,” I think we must consider the particular refrain of geopolitics that is capable of, by scientific as well as more humbly embodied standards, destroying worlds along with the world. To eschew geopolitics simply because, as a refrain, it is too big, too grand, or too universal would ignore the conditions of possibility for nuclear weapons, power politics, and carbon-based globalization, and would greatly impoverish the explanatory capability of even the best climate models. So maybe it is not so strange that Crutzen and others’ attention to the nuclear threat of great powers has all but disappeared despite the fact that Russia and the United States still possess thousands of nuclear weapons, and as of late have been all too vocal about using them. Instead, the Anthropocene, as envisioned by Crutzen as a universal concern, requires with it a depoliticization of the causes of that concern.

### 1NC – Extinction First

#### Grove answers the extinction first block – their analysis of catastrophe as a one off event in the future is wrong and abstracts away from the ongoing ecological extinctions of the status quo – their crisis oriented politics are the link

#### Even if extinction outweighs, it’s inevitable and this round can’t change that – but our alternative evidence proves we have an ethical obligation to create new modes of subjectivity and lives worth living in the time we have left – even if their framework arguments are true subject formation is a prior question and the only portable aspect of debate

#### Moral uncertainty is fake – we’ll win that we’re right so there’s no impact to it – justifies saying “we can’t be sure slavery is bad” or “maybe imperialism is ok sometimes”

#### Don’t hold the status quo hostage for future generations – it’s the same logic as banning abortions to protect possible future lives

### 1NC – War

#### No miscalc or escalation

James Pavur 19, Professor of Computer Science Department of Computer Science at Oxford University and Ivan Martinovic, DPhil Researcher Cybersecurity Centre for Doctoral Training at Oxford University, “The Cyber-ASAT: On the Impact of Cyber Weapons in Outer Space”, 2019 11th International Conference on Cyber Conflict: Silent Battle T. Minárik, S. Alatalu, S. Biondi, M. Signoretti, I. Tolga, G. Visky (Eds.), <https://ccdcoe.org/uploads/2019/06/Art_12_The-Cyber-ASAT.pdf>

A. Limited Accessibility Space is difficult. Over 60 years have passed since the first Sputnik launch and only nine countries (ten including the EU) have orbital launch capabilities. Moreover, a launch programme alone does not guarantee the resources and precision required to operate a meaningful ASAT capability. Given this, one possible reason why space wars have not broken out is simply because only the US has ever had the ability to fight one [21, p. 402], [22, pp. 419–420]. Although launch technology may become cheaper and easier, it is unclear to what extent these advances will be distributed among presently non-spacefaring nations. Limited access to orbit necessarily reduces the scenarios which could plausibly escalate to ASAT usage. Only major conflicts between the handful of states with ‘space club’ membership could be considered possible flashpoints. Even then, the fragility of an attacker’s own space assets creates de-escalatory pressures due to the deterrent effect of retaliation. Since the earliest days of the space race, dominant powers have recognized this dynamic and demonstrated an inclination towards de-escalatory space strategies [23]. B. Attributable Norms There also exists a long-standing normative framework favouring the peaceful use of space. The effectiveness of this regime, centred around the Outer Space Treaty (OST), is highly contentious and many have pointed out its serious legal and political shortcomings [24]–[26]. Nevertheless, this status quo framework has somehow supported over six decades of relative peace in orbit. Over these six decades, norms have become deeply ingrained into the way states describe and perceive space weaponization. This de facto codification was dramatically demonstrated in 2005 when the US found itself on the short end of a 160-1 UN vote after opposing a non-binding resolution on space weaponization. Although states have occasionally pushed the boundaries of these norms, this has typically occurred through incremental legal re-interpretation rather than outright opposition [27]. Even the most notable incidents, such as the 2007-2008 US and Chinese ASAT demonstrations, were couched in rhetoric from both the norm violators and defenders, depicting space as a peaceful global commons [27, p. 56]. Altogether, this suggests that states perceive real costs to breaking this normative tradition and may even moderate their behaviours accordingly. One further factor supporting this norms regime is the high degree of attributability surrounding ASAT weapons. For kinetic ASAT technology, plausible deniability and stealth are essentially impossible. The literally explosive act of launching a rocket cannot evade detection and, if used offensively, retaliation. This imposes high diplomatic costs on ASAT usage and testing, particularly during peacetime. C. Environmental Interdependence A third stabilizing force relates to the orbital debris consequences of ASATs. China’s 2007 ASAT demonstration was the largest debris-generating event in history, as the targeted satellite dissipated into thousands of dangerous debris particles [28, p. 4]. Since debris particles are indiscriminate and unpredictable, they often threaten the attacker’s own space assets [22, p. 420]. This is compounded by Kessler syndrome, a phenomenon whereby orbital debris ‘breeds’ as large pieces of debris collide and disintegrate. As space debris remains in orbit for hundreds of years, the cascade effect of an ASAT attack can constrain the attacker’s long-term use of space [29, pp. 295– 296]. Any state with kinetic ASAT capabilities will likely also operate satellites of its own, and they are necessarily exposed to this collateral damage threat. Space debris thus acts as a strong strategic deterrent to ASAT usage.

#### No one’s going to war over a downed satellite

Bowen 18 [Bleddyn Bowen, Lecturer in International Relations at the University of Leicester. The Art of Space Deterrence. February 20, 2018. https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/]

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

#### Space hotlines check miscalc

Roman 15—freelance writer at Tech Times [Julienne, 11/24/2015, “US, China Set Up Space Hotline To Avoid Satellite Warfare”, Tech Times, <http://www.techtimes.com/articles/109998/20151124/us-china-set-up-space-hotline-to-avoid-satellite-warfare.htm>] AMarb

The United States and China have set up a space hotline between them. This connection will be used to facilitate the exchange of information between the two countries and prevent satellite-related conflicts and misunderstandings. There have been fears of the possibility of warfare in space after China blew up a satellite during one of its test runs of its anti-satellite technology back in 2007. Military operations and intelligence-gathering efforts that are dependent on satellites could be severely derailed by such weapons. The two powerhouse nations have been investing in weaponry that can destroy satellites that can be used during military operations. Frank Rose, U.S. assistant secretary of state, said that China has been testing out anti-satellite weapons. In order to prevent the space tests from causing misunderstandings that would then result into space wars, the new hotline will provide quick access between authorities in China and the United States. The direct link will make it easier to convey certain necessary information to prevent any conflicts.

### 1NC – Astronomy

#### Joke of a card – just mentions a bunch of things but does not say any of them have an impact much less extinction

#### Tons of countermeasures prevent asteroid collisions

Rees 18—Fellow of Trinity College and Emeritus Professor of Cosmology and Astrophysics at the University of Cambridge, holds the honorary title of Astronomer Royal and also Visiting Professor at Imperial College London and at Leicester University [Martin, 2018, *On the Future Prospects for Humanity*, Chapter 1: Deep in the Anthropocene, Princeton University Press, Accessed through the Wake Forest Library] AMarb

You may guess that, being an astronomer, anxiety about asteroid collisions keeps me awake at night. Not so. Indeed, this is one of the few threats that we can quantify—and be confident is unlikely. Every ten million years or so, a body a few kilometres across will hit the Earth, causing global catastrophe—so there are a few chances in a million that such an impact occurs within a human lifetime. There are larger numbers of smaller asteroids that could cause regional or local devastation. The 1908 Tunguska event, which flattened hundreds of square kilometres of (fortunately unpopulated) forests in Siberia, released energy equivalent to several hundred Hiroshima bombs. Can we be forewarned of these crash landings? The answer is yes. Plans are afoot to create a data set of the one million potential Earth-crossing asteroids larger than 50 metres and track their orbits precisely enough to identify those that might come dangerously close. With the forewarning of an impact, the most vulnerable areas could be evacuated. Even better news is that we could feasibly develop spacecraft that could protect us. A ‘nudge’, imparted in space several years before the threatened impact, would only need to change an asteroid’s velocity by a few centimetres per second to deflect it from a collision course with the Earth.

### 1NC – Ozone

#### Laundry list of alt causes

**NOAA No Date** [NOAA, “The Ozone Layer” info page, Accessed 7/19/2011; <http://www.oar.noaa.gov/climate/t_ozonelayer.html>; Boyce]

Ozone-Depleting Substances Certain industrial processes and consumer products result in the atmospheric emission of ozone-depleting gases. These gases contain chlorine and bromine atoms, which are known to be harmful to the ozone layer. Important examples are the CFCs and hydrochlorofluorocarbons (HCFCs), human-produced gases once used in almost all refrigeration and air conditioning systems. These gases eventually reach the stratosphere, where they are broken apart to release ozone-depleting chlorine atoms. Other examples are the halons, which are used in fire extinguishers and which contain ozone-depleting bromine atoms. Methyl bromide, is another important area of research for NOAA scientists. Primarily used as an agricultural fumigant, it is also a significant source of bromine to the atmosphere. Although some ozone-depleting gases also are emitted from natural sources, emissions from human activities exceed those from natural sources. NOAA researchers regularly measure ozone depleting gases in the lower and upper atmosphere and attempt to account for observed changes. As a result of international regulations, ozone-depleting gases are being replaced in human activities with "ozone-friendly" gases that have much reduced potential to deplete ozone. NOAA researchers are also measuring these "substitute" gases as they accumulate in the atmosphere. Observing changes in both old and new gases emitted into the atmosphere allows researchers to improve our understanding of the fate of these gases after release and thereby improve our ability to predict future ozone changes.

#### Here's some more

Lin et al 17 [Meiyun Lin, Research Scholar (with tenure) at NOAA and Princeton University’s Cooperative Institute for Climate Science, Ph.D. from the University of Tokyo, Larry W. Horowitz, NOAA Geophysical Fluid Dynamics Laboratory, Richard Payton, Division Director, Air Quality Assessment Division at the EPA, Arlene M. Fiore, Professor in the Earth and Environmental Sciences dept. at Columbia, where they specialize in Ocean and Climate Physics, has a Ph.D. in Earth and Planetary Sciences from Harvard, and Gail Tonnesen, EPA Air Program, “US surface ozone trends and extremes from 1980 to 2014: quantifying the roles of rising Asian emissions, domestic controls, wildfires, and climate” Atmos. Chem. Phys., 17, 1–28, 2017, http://www.atmos-chem-phys.net/17/2943/2017/acp-17-2943-2017.pdf, wyo-sc]

Within the United States, ground-level O3 has been recognized since the 1940s and 1950s as an air pollutant detrimental to public health. Decreases in summertime O3 were observed in parts of California and throughout the EUS (e.g., Cooper et al., 2012; Simon et al., 2015), following regional NOx controls after the lowering of the US National Ambient Air Quality Standard (NAAQS) for O3 in 1997 to 84 ppb. On the basis of health evidence, the NAAQS level for O3 has been further lowered to 75 ppb in 2008 and to 70 ppb in 2015 (Federal Register, 2015). There are concerns that rising Asian emissions and global methane (Jacob et al., 1999; Lin et al., 2015b), more frequent large wildfires in summer (e.g., Jaffe, 2011; Yang et al., 2015; Abatzoglou et al., 2016), and late spring deep stratospheric O3 intrusions (Lin et al., 2012a, 2015a; Langford et al., 2014) may pose challenges in attaining more stringent O3 standards in high-elevation WUS regions. A warming climate would also offset some of the air quality improvements gained from regional emission controls (e.g., Fiore et al., 2015). Quantitative understanding of sources of O3 variability on daily to multi-decadal timescales can provide valuable information to air quality control managers as they develop O3 abatement strategies under the NAAQS. Here we systemically investigate the response of US surface O3 means and extremes to changes in Asian and North American anthropogenic emissions, global methane, regional heat waves, and wildfires over the course of 35 years from 1980 to 2014, using observations and chemistry-climate model (GFDL-AM3) hindcasts (Lin et al., 2014, 2015a, b). Rapid economic growth has led to a tripling of O3 precursor emissions from Asia in the past 25 years (e.g., Granier et al., 2011; Hilboll et al., 2013). Observed 1 h O3 mixing ratios can frequently reach 200–400 ppb during regional pollution episodes in eastern China (Wang et al., 2006; Li et al., 2016), with a seasonal peak in the late spring to early summer (Wang et al., 2008; Lin et al., 2009). A synthesis of available observations from the mid-1990s to the 2000s indicates increases of 1–2 ppb yr−1 in spring to summer O3 in China (Ding et al., 2008; Ma et al., 2016; Sun et al., 2016). Longrange transport of Asian pollution plumes towards western North America has been identified by aircraft and satellite measurements and in chemical transport models (e.g., Jaffe et al., 1999; Fiore et al., 2009; Brown-Steiner and Hess, 2011; Lin et al., 2012b; Huang et al., 2013; Verstraeten et al., 2015). Systematic comparison of observed and modeled long-term O3 trends over Asia is lacking in the published literature but is needed to establish confidence in models used to assess the global impacts of rising Asian emissions. Model simulations indicate that import of Asian pollution enhances mean WUS surface O3 in spring by ∼ 5 ppb (Zhang et al., 2008; Lin et al., 2012b), and occasionally contributes 8–15 ppb during springtime pollution episodes observed at rural sites (Lin et al., 2012b) as supported by in situ aerosol composition analysis (VanCuren and Gustin, 2015). Stratospheric intrusions can episodically increase daily 8 h average surface O3 by 20–40 ppb, contributing to the highest observed O3 events at high-elevation WUS sites (Lin et al., 2012a, 2015a), in addition to pollution transport from California (e.g., Langford et al., 2010). In the densely populated EUS, both changes in regional anthropogenic emissions and air pollution meteorology have the greatest impacts on summer surface O3 during pollution episodes (e.g., Jacob and Winner 2009; Rieder et al., 2015; Porter et al., 2015; Pusede et al., 2015). Discerning directly the effect of climate change on air quality from long-term observation records of O3 would be ideal, but concurrent trends in precursor emissions and large internal variability in regional climate impede such an effort. It is difficult to separate the impacts of changes in global-to-regional precursor emissions and different meteorological factors on O3 at given locations without the benefit of multiple sensitivity experiments afforded by models.

#### AND the public sector thumps because they will still launch – their evidence is not specific enough

### 1NC – Grid

#### Batteries now solve grid

Cusick, 1-1—E&E News (Daniel, “Battery Storage Poised to Expand Rapidly,” <https://www.scientificamerican.com/article/battery-storage-poised-to-expand-rapidly/>, dml)

Thanks in part to California's crisis, but also improving economics and new state policies, the technology is preparing for unprecedented growth in the United States over the next several years. As much as 1,800 megawatts of new energy storage — mostly from lithium-ion batteries — is expected to come online by 2021, according to GTM Research, which tracks the sector for the Energy Storage Association.

That's eight times larger than total U.S. installed energy storage capacity in 2016 and should translate into nearly 5,900 megawatt-hours of stored electricity that can be dispatched quickly to address power outages, shave peak demand charges or simply enhance grid reliability, according to experts.

Energy storage is also critical to solving the intermittency challenges associated with renewable energy. That's because batteries can smooth the ebbs and flows associated with wind and solar power by supplementing the grid when those resources are not available.

“One of the trends we're seeing lately, and what could be a game-changer, is the level of utility interest and involvement,” said Anissa Dehamna, a principal research analyst and head of the energy storage team at Navigant Research. “We've had growth of a little over 200 percent [annually] in the past, and we're expecting that trend to continue in the North American market.”

#### Critical infrastructure is impervious now.

Uchill 18 Joe Uchill, Cybersecurity reporter at Axios, former cybersecurity reporter at The Hill, internally citing Department of Homeland Security officials and other cybersecurity experts. [Why "crashing the grid" doesn't keep cyber experts awake at night, 8-23-18, https://www.axios.com/why-crashing-the-grid-doesnt-keep-cyber-experts-awake-at-night-a40563a5-f266-493d-856a-5c9a5c1383dd.html]

Reality check: The people tasked with protecting U.S. electrical infrastructure say the scenario where hackers take down the entire grid — the one that's also the plot of the "Die Hard" movie where Bruce Willis blows up a helicopter by launching a car at it — is not a realistic threat. And focusing on the wrong problem means we’re not focusing on the right ones. So, why can't you hack the grid? Here's one big reason: "The thing called the grid does not exist," said a Department of Homeland Security official involved in securing the U.S. power structure. Think of the grid like the internet. We refer to the collective mess of servers, software, users and equipment that routes internet traffic as "the internet." The internet is a singular noun, but it’s not a singular thing. You can’t hack the entire internet. There’s so much stuff running independently that all you can hack is individual pieces of the internet. Similarly, the North American electric grid is actually five interconnected grids that can borrow electricity from each other. And the mini-grids aren't singular things either. Taking down "the grid" would be more like collapsing the thousands of companies that provide and distribute power accross the country. "When someone talks about 'the grid,' it's usually a red flag they aren't going to know what they are talking about," says Sergio Caltagirone, director of threat intelligence at Dragos, a firm that specializes in industrial cybersecurity including the energy sector. Redundancy and resilience: Every aspect of the electric system, from the machines in power plants to the grid as a whole, is designed with redundancy in mind. You can’t just break a thing or 10 and expect a prolonged blackout. On some level, most people already know this. Everyone has lived through blackouts, but no one has lived through a blackout so big it caused the Purge. 'The power system is the most complex machine ever made by humans," said Chris Sistrunk, principal consultant at FireEye in energy cybersecurity. "Setting it up, or hacking it, is more complicated than putting a man [person] on the moon." An attack that took out power to New York using cyber means would require a nearly prohibitive amount of effort to coordinate, said Lesley Carhart of Dragos. Such a failure would also tip off other regions that there was an attack afoot. Causing a power outage in New York would likely prevent a power outage in Chicago.

#### Grid shutdown is just a nuisance—no impact

Douglas Birch 12, former foreign correspondent for the Associated Press and the Baltimore Sun who has written extensively on technology and public policy, "Forget Revolution," October 1, Foreign Policy, www.foreignpolicy.com/articles/2012/10/01/forget\_revolution?page=full

Government officials sometimes describe a kind of Hieronymus Bosch landscape when warning of the possibility of a cyber attack on the electric grid. Imagine, if you will, that the United States is blindsided by an epic hack that interrupts power for much of the Midwest and mid-Atlantic for more than a week, switching off the lights, traffic signals, computers, water pumps, and air conditioners in millions of homes, businesses, and government offices. Americans swelter in the dark. Chaos reigns! ¶ Here's another nightmare scenario: An electric grid that serves two-thirds of a billion people suddenly fails in a developing, nuclear-armed country with a rich history of ethnic and religious conflict. Rail transportation is shut down, cutting off travel to large swathes of the country, while many miners are trapped underground. ¶ Blackouts on this scale conjure images of civil unrest, overwhelmed police, crippled hospitals, darkened military bases, the gravely injured in the back of ambulances stuck in traffic jams. ¶ The specter of what Defense Secretary Leon Panetta has called a "digital Pearl Harbor" led to the creation of U.S. Cyber Command, which is tasked with developing both offensive and defensive cyber warfare capabilities, and prompted FBI Director Robert Mueller to warn in March that cyber attacks would soon be "the number one threat to our country." Similar concerns inspired both the Democrats and Republicans to sound the alarm about the cyber threat in their party platforms. ¶ But are cyber attacks really a clear and present danger to society's critical life support systems, capable of inflicting thousands of casualties? Or has fear of full-blown cybergeddon at the hands of America's enemies become just another feverish national obsession -- another of the long, dark shadows of the 9/11 attacks? ¶ Worries about a large-scale, devastating cyber attack on the United States date back several decades, but escalatedfollowing attacks on Estonian government and media websites during a diplomatic conflict with Russia in 2007. That digital ambush was followed by a cyber attack on Georgian websites a year later in the run-up to the brief shooting war between Tbilisi and Moscow, as well as allegations of a colossal, ongoing cyber espionage campaign against the United States by hackers linked to the Chinese army. ¶ Much of the concern has focused on potential attacks on the U.S. electrical grid. "If I were an attacker and I wanted to do strategic damage to the United States...I probably would sack electric power on the U.S. East Coast, maybe the West Coast, and attempt to cause a cascading effect," retired Admiral Mike McConnell said in a 2010 interview with CBS's 60 Minutes. ¶ But the scenarios sketched out above are not solely the realm of fantasy. This summer, the United States and India were hit by two massive electrical outages -- caused not by ninja cyber assault teams but by force majeure. And, for most people anyway, the results were less terrifying than imagined. ¶ First, the freak "derecho" storm that barreled across a heavily-populated swath of the eastern United States on the afternoon of June 29 knocked down trees that crushed cars, bashed holes in roofs, blocked roads, and sliced through power lines. ¶ According to an August report by the U.S. Department of Energy, 4.2 million homes and businesses lost power as a result of the storm, with the blackout stretching across 11 states and the District of Columbia. More than 1 million customers were still without power five days later, and in some areas power wasn't restored for 10 days. Reuters put the death tollat 23 people as of July 5, all killed by storms or heat stroke. ¶ The second incident occurred in late July, when 670 million people in northern India, or about 10 percent of the world's population, lost power in the largest blackout in history. The failure of this huge chunk of India's electric grid was attributed to higher-than-normal demand due to late monsoon rains, which led farmers to use more electricity in order to draw water from wells. Indian officials told the media there were no reports of deaths directly linked to the blackouts. ¶ But this cataclysmic event didn't cause widespread chaos in India -- indeed, for some, it didn't even interrupt their daily routine. "[M]any people in major cities barely noticed the disruption because localized blackouts are so common that many businesses, hospitals, offices and middle-class homes have backup diesel generators," the New York Timesreported. ¶ The most important thing about both events is what didn't happen. Planes didn't fall out of the sky. Governments didn't collapse. Thousands of people weren't killed. Despite disruption and delay, harried public officials, emergency workers, and beleaguered publics mostly muddled through.¶ The summer's blackouts strongly suggest that a cyber weapon that took down an electric grid even for several days could turn out to be little more than a weapon of mass inconvenience.¶ "Reasonable people would have expected a lot of bad things to happen" in the storm's aftermath, said Neal A. Pollard, a terrorism expert who teaches at Georgetown University and has served on the United Nation's Expert Working Group on the use of the Internet for terrorist purposes. However, he said, emergency services, hospitals, and air traffic control towers have backup systems to handle short-term disruptions in power supplies. After the derecho, Pollard noted, a generator truck even showed up in the parking lot of his supermarket.¶ The response wasn't perfect, judging by the heat-related deaths and lengthy delays in the United States in restoring power. But nor were the people without power as helpless or clueless as is sometimes assumed.¶ That doesn't mean the United States can relax. James Lewis, director of the technology program at the Center for Strategic and International Studies, believes that hackers threaten the security of U.S. utilities and industries, and recently penned an op-ed for the New York Times calling the United States "defenseless" to a cyber-assault. But he told Foreign Policy the recent derecho showed that even a large-scale blackout would not necessarily have catastrophic consequences.¶ "That's a good example of what some kind of attacks would be like," he said. "You don't want to overestimate the risks. You don't want somebody to be able to do this whenever they felt like it, which is the situation now. But this is not the end of the world."

### 1NC – Acidification

#### No acidification impact

Moore 15 (Dr. Patrick, former leader of Greenpeace; Chairman of Ecology, Energy and Prosperity with Canada’s Frontier Centre for Public Policy, Ph.D. in Ecology, University of British Columbia, “Why Coral Reefs and Shellfish Will Not Die From ‘Ocean Acidification’”, <http://news.heartland.org/editorial/2015/05/27/why-coral-reefs-and-shellfish-will-not-die-ocean-acidification>)

The hypothesis that “ocean acidification” will kill corals and shellfish due to higher levels of carbon dioxide dissolved in the sea is often used to stoke fear in the hearts of nature lovers. Here’s why I don’t believe there is a shred of evidence to support these claims. When the slight global warming that occurred between 1970 and 2000 came to a virtual standstill, the doomsayers adopted “climate change”, which apparently means all extreme weather events are caused by human emissions of CO2. Cold, hot, wet, dry, wind, snow and large hailstones are attributed to humanity’s profligate use of fossil fuels. But the pause in global warming kept on and became embarrassing around 2005. Something dire was needed to prop up the climate disruption narrative. “Ocean acidification” was invented to provide yet another apocalyptic scenario, only this one required no warming or severe weather, just more CO2 in the atmosphere. The story goes that as CO2 increases in the atmosphere the oceans will absorb more of it and this will cause them to become acidic — well, not exactly, but at least to become less basic. This in turn is predicted to dissolve the coral reefs and kill the oysters, clams, mussels and algae that have calcareous shells. It was named “global warming’s evil twin”. Seawater in the open ocean is typically at a pH of 8.0-8.5 on a scale of 0-14, where 0 is the most acidic, 14 is most basic and 7 is neutral. Ocean acidification from increased CO2 is predicted to make the ocean less basic, perhaps to pH 7.5 under so-called worst-case projections. How do I know that increased CO2 will not kill the coral reefs and shellfish? Let me count the ways. First, contrary to popular ­belief, at 400 parts per million (0.04 per cent), CO2 is lower now in the atmosphere than it has been during most of the 550 million years since modern life forms emerged during the Cambrian period. CO2 was about 10 times higher then than it is today. Corals and shellfish evolved early and have obviously managed to survive through eras of much higher CO2 than present levels. This alone should negate the “predictions” of species extinction from CO2 levels nowhere near the historical maximum. Second, due to its high concentration of basic elements such as calcium and magnesium, sea­water has a powerful buffering capacity to prevent large swings in pH due to the addition of CO2.This self-correcting capacity of seawater will ensure the pH will remain well within levels conducive to calcification, the process whereby shells and coral structures are formed. Marine shells are largely made of calcium carbonate, the carbon of which is derived from the CO2 dissolved in the seawater. Third, and most interesting, there are freshwater species of clams and mussels that manage to produce calcareous shells at pH 4-5, well into the acidic range. They are able to do this because a mucous layer on their shell allows them to control the pH near the surface and to make calcification possible beneath the mucous layer. The “ocean acidification” story depends only on a chemical hypothesis whereas biological factors can overcome this and create conditions that allow calcification to continue. This is corroborated by the historical record of millions of years of success in much higher CO2 environments.

#### Their ev is terrible, isolates numerous alt causes like “global heating to widespread pollution, overfishing and invasive alien species.”

### 1NC – Food

#### Food insecurity doesn’t cause war

Vestby et al 18 [Jonas Vestby, Doctoral Researcher at the Peace Research Institute Oslo, Ida Rudolfsen, doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO, and Halvard Buhaug, Research Professor at the Peace Research Institute Oslo (PRIO); Professor of Political Science at the Norwegian University of Science and Technology (NTNU); and Associate Editor of the Journal of Peace Research and Political Geography, “Does hunger cause conflict?”, 5/18/18, https://blogs.prio.org/ClimateAndConflict/2018/05/does-hunger-cause-conflict/]

It is perhaps surprising, then, that there is little scholarly merit in the notion that a short-term reduction in access to food increases the probability that conflict will break out. This is because to start or participate in violent conflict requires people to have both the means and the will. Most people on the brink of starvation are not in the position to resort to violence, whether against the government or other social groups. In fact, the urban middle classes tend to be the most likely to protest against rises in food prices, since they often have the best opportunities, the most energy, and the best skills to coordinate and participate in protests.

Accordingly, there is a widespread misapprehension that social unrest in periods of high food prices relates primarily to food shortages. In reality, the sources of discontent are considerably more complex – linked to political structures, land ownership, corruption, the desire for democratic reforms and general economic problems – where the price of food is seen in the context of general increases in the cost of living. Research has shown that while the international media have a tendency to seek simple resource-related explanations – such as drought or famine – for conflicts in the Global South, debates in the local media are permeated by more complex political relationships.