# 1AC

### 1AC---Plan

#### Plan: The United States federal judiciary should substantially increase prohibitions on private sector conduct that is more restrictive of competition than reasonably necessary to enable creation of information technology standards.

### 1AC---Cybersecurity

#### The Advantage is Cybersecurity:

#### Standards-Setting Organizations (SSO’s) are industry members who jointly establish standards for information tech defined by the adoption of standard-essential patents (SEP’s), which are licensed to companies who wish to implement the tech in their product, called implementers, on Fair, Reasonable, and Non-Discriminatory (FRAND) terms. Current standards promote price gouging, FRAND enforcement is critical.

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I. Standard Setting and the Competitive Process The fundamental economics in the information technology sector, driven by network effects, implies that there is enormous value associated with establishing compatibility standards. Popular standards include the mobile broadband standards used in cell phones, which are established by the 3rd Generation Partnership Project (3GPP), and the Wi-Fi technology for wireless local area networks, which is enabled by the 802.11 standard established by the Institute of Electrical and Electronics Engineers (IEEE).4 There are many SSOs, and their rules and procedures differ considerably. In addition to IEEE, leading SSOs include the International Organization for Standardization (ISO), the International Telecommunication Union (ITU), the European Telecommunications Standards Institute (ETSI), the Internet Engineering Task Force (IETF), and the World Wide Web Consortium (W3C).5 SSOs generally establish standards by holding a series of committee meetings among industry participants. These meetings culminate in a vote on a technical specification that describes what features or attributes a product must have in order to comply with the standard. Most SSOs are open to all industry participants and seek to operate on a consensus basis, applying certain voting rules. SSOs do not normally engage in patent licensing, nor do they specify how patent royalties will be divided up among patent holders. They leave that to their members, which in some cases form patent pools to address these issues.6 SSOs adopt specific policies relating to intellectual property rights (IPRs).7 These IPR policies are generally intended to enable the SEP holders to obtain reasonable royalties for licensing their patents, while prohibiting them from charging excessive royalties after other industry participants have committed to the standard. At that point, firms committed to implementing the standard— which we call “implementers”—would find it very costly to avoid using the patented technology. For this purpose, most SSOs require SEP owners to license their SEPs on FRAND terms.8 FRAND policies are especially necessary because negotiations between SEP holders and implementers generally take place only after the implementers have used and infringed the technologies claimed by the SEPs. Standards involving information and communications technology can involve hundreds or even thousands of SEPs, many with uncertain boundaries for infringement. In addition, a time lag exists between patent application and patent issuance. For these and other reasons, it is impractical for implementers to enter into negotiations for patent licenses with all SEP owners prior to the establishment of a standard and to their implementation of it.9 The fact that patent negotiations generally do not take place until after implementers have used and infringed the technologies has several critical implications. First, at the time of negotiation, implementers are locked into the standard and the technologies claimed by the SEPs—that is, the cost to switch to an alternative technology or standard at that point—ex post—is much greater than it was ex ante, before the patented technology was first included in the standard. Ex post, the patent holder is no longer competing to have its technology included in the standard, nor is it competing to have implementers of the standard use its technology. Instead, because the patent holder owns an asset that is essential to the standard, implementers have no choice but to use the patented technology. If the standard is commercially successful, implementers are willing to pay a much larger royalty for use of the patented technology than they would have paid ex ante, when the SEP holder faced competition from other technologies. In these circumstances, the SEP holder can be said to have obtained monopoly power in the market in which the patented technology is licensed for use in implementing the standard.10 Second, because of lock-in and the implementer’s ongoing infringement, the potential for litigation looms large in licensing negotiations. In effect, the parties are negotiating about how to settle an infringement suit, and that negotiation is heavily influenced by their predictions as to what the court will do if they cannot agree. This situation is not unique to SEPs; it arises frequently when firms are faced with patent infringement claims for products they have independently developed or technologies they have inadvertently infringed. Patent law addresses such instances by specifying that patent holders are entitled to “reasonable royalties,” defined as the royalties that the parties would have negotiated prior to the infringement and thus prior to lock-in.11 Those hypothetical ex ante royalties reflect the market value of the patent license. Notwithstanding the law’s embrace of this principle, however, as a practical matter, patent holders are generally able to recover more than the ex ante value of the patent when litigation occurs after the implementers are locked in. Further, negotiations in the shadow of litigation after lock-in tend to result in royalties in excess of the ex ante or market value of the patented technology.12 Third, the shadow of litigation is particularly problematic in the communications and technology sector, in which products typically include hundreds or thousands of patented technologies. A court-ordered injunction involving such products would deprive the implementer of not only the value of the technology covered by the patent-in-suit, but also the value of the entire product.13 Implementers that are forced to bear the risk of an injunction are thus induced to agree to royalties greater than those that would be appropriate if only the value of the patented technology were at stake. Those royalties systematically provide SEP holders with excessive compensation in comparison with the benchmark of ex ante royalties. These implications of lock-in and ex post dealings are well-understood: they represent an example of the general concept of lock-in and opportunism developed by Oliver Williamson.14 The Federal Circuit has also recognized the market distortions caused by the inclusion of patented technologies in public standards and the resulting danger of patent holdup involving SEPs.15 For these and other reasons, the SEP holder has ex post monopoly power that, if left unchecked, would enable it to obtain royalties far in excess of the royalties that it could earn in a competitive market.16 To address this common problem and limit ex post opportunism by SEP holders, SSOs typically require participants that own SEPs to make certain FRAND commitments. In particular, by requiring a commitment to license on “fair and reasonable” terms, the FRAND requirement aims to prevent, or at least reduce, the extent of monopoly pricing by SEP holders. And by requiring a commitment to license on “nondiscriminatory” terms, the FRAND requirement can prevent SEP holders from extracting monopoly premiums by selective licensing or, more important, migrating their monopoly power from the FRAND-regulated market to unregulated standard-implementing product markets by licensing to only one or a few implementers or licensing to selected implementers on discriminatorily favorable terms.

#### Aggressive patent strategies create structural flaws in 5G standardization that imperils domestic cybersecurity---market competition reduces the incidence of vulnerability and severity of attacks.

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III. COMPETITION AND CYBERSECURITY In addition to the historical review done so far, another approach to understanding the relationship among patents, competition, and national security is to consider the role of cybersecurity. There is little doubt that computer system vulnerabilities that enable hacking and spread of computer exploits are a threat to the nation’s defenses, so better cybersecurity is a key part of national security strategy.155 Strong competition can thus complement national security by enhancing domestic cybersecurity, and patent assertion that unduly weakens competition detracts from cybersecurity.156 Competition promotes better cybersecurity in at least two ways. First, multiple studies show that competition encourages firms to improve their products on multiple vectors including cybersecurity. Second, competition avoids a situation that security experts call a “monoculture,” which increases vulnerability to severe cyberattacks. As former Secretary of Homeland Security Michael Chertoff wrote recently, “We need competition and multiple providers, not a potentially vulnerable technological monoculture,” to guarantee national security.157 Thus, cybersecurity provides a useful lens for understanding how unfettered patent assertion and licensing can detract from national security. A. Cybersecurity as Competitive Value-Add Competition enhances national security by reducing the incidence of technical vulnerabilities. That effect is especially important for security sensitive systems such as mobile telecommunications. Intuitively, a causal chain from competition to cybersecurity makes logical sense. Computer security is a value-added benefit to consumers, so firms in competitive markets are likely to use security to gain an edge over their competitors.158 In monopolized markets, though, there may be less external impetus to test products for flaws, and the monopolist may choose to focus less on security and more on new product features or increased product quality. Economic research confirms these hypotheses about competition leading to better cybersecurity. A 2009 empirical study of web browsers considered the impact of market concentration on the amount of time that vendors took to fix security vulnerabilities as they were discovered.159 The study found that the presence of more competitors correlated with faster cybersecurity response—a reduction of 8–10 days in response time per additional market rival.160 Similarly, business researchers in 2005 modeled incentives for firms to engage in sharing of cybersecurity information, and concluded that the “inclination to share information and invest in security technologies increases as the degree of competitiveness in an industry increases.”161 Another study found that, where two software firms are in competition, at least one will be willing to take on some degree of risk and responsibility for cybersecurity, whereas a monopoly software firm will consistently fail to accept such responsibility.162 To be sure, an unpublished study from 2017 found that some market concentration can make firms more responsive to cybersecurity issues, but only to a point: “being in a dominant position reduces the positive effect of having less competitors on the responsiveness of the vendor,” and indeed the “more dominant the firm is, the less rapid it is in releasing security patches.”163 This research confirms that competition is more conducive to cybersecurity. It is not hard to see how this applies to emerging communication technologies markets. In the absence of competition, the above research suggests that device manufacturers, chip makers, and software developers will lack incentives to respond to vulnerabilities, to share information about cybersecurity practices and issues, and to take responsibility for security matters. Mobile phone chips have had their share of cybersecurity failures already.164 The best way to flush out ongoing and future cybersecurity issues is to maintain competitive pressure at all levels of the supply chain. B. Vulnerabilities of “Monocultures” A second reason why monopoly undermines cybersecurity is that monopoly leads to a “monoculture” of single-vendor products, opening the door to massive systemic failure in the case of a cyberattack. Computer researchers developed the theory of software monocultures in the early 2000s, in response to the regular phenomenon of computer viruses and other attacks spreading rapidly by exploiting flaws in the dominant operating system at the time, Microsoft Windows.165 Where a computer system such as Windows has a commanding share of users, a virus that exploits a flaw in that system can quickly spread to infect a whole interconnected ecosystem. An operating system monopoly thus enables fast and easy spread of cyberattacks, and better cybersecurity would be achieved through greater diversity in online systems.166 As one research group posited, “a network architecture that supports a collection of heterogeneous network elements for the same functional capability offers a greater possibility of surviving security attacks as compared to homogeneous networks.”167 There has been considerable study of the theory that computer monocultures are naturally more vulnerable to attacks.168 In one study, computer science researchers reviewed a catalog of 6,340 software vulnerabilities recorded in 2007, to compare whether comparable software would share the same flaws.169 Of the 2,627 vulnerabilities applicable to application software (as opposed to operating systems, web scripts, and other software components), only 29 (1.1%) applied to substitute products from different vendors but providing the same functionality.170 By contrast, different versions of a single software product were found to share vulnerabilities 84.7% of the time.171 Thus, software monocultures share exploitable flaws even when there is some variation in versions across the monoculture; by contrast, diversity in software is almost guaranteed to prevent a single flaw from affecting all users. In the case of 5G and wireless mobile communications, a monoculture is an especially concerning possibility. To the extent that systems such as smart city sensors or communication networks are widely deployed in a monoculture fashion, a widespread attack could have devastating consequences, potentially blacking out a region and affecting essential services such as 911.172 A monoculture that is vulnerable to so-called “rootkits” or “backdoors”—maliciously installed software that enable bad actors to commandeer systems—could also enable mass surveillance or spying by private hackers or foreign governments.173 The presence of systems from multiple vendors would mitigate these possibilities. The monoculture theory is not without critics, but a review of those criticisms shows them to be inapplicable to contemporary communication technologies. Some critics suggest that software diversity imposes unwarranted costs on firms who must forego economies of scale and devise seemingly duplicative yet different setups of computer systems.174 But those concerns largely focus on the situation where a single firm produces and manages heterogeneous systems, concerns that are avoided where heterogeneity arises naturally through competition between two unrelated firms. Critics also argue that technological measures can create “artificial diversity” through automated randomization of software code, so software engineers can purportedly solve monoculture issues and device users need not worry about the issue.175 But even these critics acknowledge that artificial diversity techniques are often insufficient because they must make assumptions about what aspects of the technology are most vulnerable to attack, and they concede that artificial diversity cannot stop attacks involving operation of legitimate software functions in undesirable ways (sending spam emails or deleting document files, for example).176 It is widely recognized that a monoculture is unavoidable in at least one respect: Most connected devices will need to conform to technical standards.177 5G, for example, is a technical standard developed by a private industry consortium called 3GPP.178 A flaw in any such standard would render all mobile devices implementing the standard vulnerable to an identical attack.179 Avoiding these sorts of systemic flaws in standards requires rigorous development, analysis, and testing of the standard in the development process, which in turn requires ensuring that as many firms as possible, especially firms that share basic American values, are involved in the development of those standards.180 Thus, the necessary standardization of information and communication technologies is perhaps the most important reason why a competitive communication technology market is essential to cybersecurity and national security.

#### 5G rollout is inevitable and vastly broadens America’s cyber vulnerabilities.

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The continuing rollout of the fifth generation of mobile networks and technologies, known collectively as 5G, is set to radically transform the business world. Incredible new speeds, dramatically reduced latency and fresh swathes of bandwidth will allow real-time connectivity on a whole new scale. Smart cities, autonomous vehicles and augmented reality present amazing opportunities, so it’s no surprise that investment in 5G technologies from governments and businesses is enormous and growing. Amid the excitement of all this technological promise, significant new dangers are being overlooked. As digital connectivity soars to new heights and internet of things devices expand to rapidly become the internet of forgotten things, organizations will face a number of serious security challenges. As someone who specializes in cybersecurity and technology, I believe it’s crucial that organizations start to consider the threats posed by a vastly broadened attack surface, machine learning manipulation and parasitic malware. Securing The Infrastructure From my perspective, organizations, businesses and individuals will quickly become reliant on 5G networks for daily life. Inevitably, 5G technologies and infrastructure will be a prime target for foreign governments and cybercriminals. The line between protectionism and concern about espionage is blurry. Any uncertainty about the technology that forms critical infrastructure should be of major concern to business leaders. While the explosion of digital connectivity presents new opportunities, it also massively increases potential attack surfaces. Many more devices and sensors will be connected by millions of new 5G masts, and these new 5G networks have a heavier reliance on software. What this means is an explosion of new attack vectors, possible vulnerabilities and weaknesses that can be exploited by a range of bad actors. All the benefits that 5G promises in terms of greater speeds and lower latency will also benefit hacktivists, enabling them to carry out attacks more rapidly and at greater scale. Fresh Threat Landscape Spoofing and jamming of 5G networks could cause serious disruption for supply chains and dependent infrastructure. By targeting embedded IoT devices, determined attackers could put vital networks under threat. Greater speed, higher bandwidth and lower latency will enhance the potency of distributed denial of service attacks. Many traditional techniques will find fresh life in the 5G future, and the impact on business could be catastrophic. As more organizations come to rely on machine learning, I predict attackers will find new ways to exploit neural networks and subvert these systems for their own gain. Manipulated machine learning could enable attackers to enrich themselves, obfuscate and deceive, ultimately sowing confusion on a grand scale. What’s worrisome is the opportunity for parasitic malware to burrow into 5G networks and systems to steal processing power and degrade the performance or even shut down critical services like water and power. Any adoption of 5G must include a proper assessment of the risks involved and plans for protection, vigilance and remediation of security incidents.

#### Cyber escalation is more likely now than ever---empirics don’t assume intensified competition and acute geopolitical conditions.

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Situational Cyber Stability: When Cyber Capabilities Can Be Destabilizing To sum up: Cyber conflict has not escalated and there are strong, theory-backed reasons why it provides negative feedback, acting as a pressure release pushing back against geopolitical crises. We agree with these conclusions, which explain why cyber conflict has not yet escalated and may not in the future. However, we believe they hold only if the next few decades generally resemble the past few. This stability is situational and we see three major, interrelated mechanisms by which it may change. Cyber conflicts and competition are intensifying over increasing stakes and might inadvertently or intentionally spark a larger conflict; there is a higher likelihood of acute crises, far worse than the relatively bland geopolitical conditions of the past decades; and in times of acute crisis, the dynamics go through an inversion, encouraging rather than suppressing escalation. Spark: Cyber Conflict Can Cause Acute Geopolitical Crises As cyberspace becomes increasingly existential for economies and societies, states compete more aggressively over the same cyber terrain and treasure. In such circumstances, cyber capabilities add positive feedback, intensifying conflict within cyberspace. Ben Buchanan has featured some of these dynamics in his book, The Cybersecurity Dilemma. If a “potential adversary bolsters its own security by increasing its methods of secrecy and ratcheting up intrusive collection of its own — or by shooting back at the collectors — the first state will often feel a need to respond” with “still more intrusive collection.”[34](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn34) This situation is one which can easily notch upward but only with great difficulty be reversed. This section will summarize the relevant dynamics of cyber conflict, establish that conflict is escalating in cyberspace, and discuss how this dangerous mix of factors can spark war. Escalation in Cyberspace Cyber conflict and competition are intensifying. A cyber incident might cross the threshold into armed conflict either through a sense of impunity or through miscalculation or mistake. Alternatively, the cyber attack might be brazen or reckless enough to demand a muscular response from the target state. Libicki’s framework of cyber escalation requires three elements: an increase in intensity, the crossing of significant thresholds, and causal links between cyber incidents (i.e., “one attack is in response to another”).[35](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn35) A cyber incident might cross the threshold into armed conflict either through a sense of impunity or through miscalculation or mistake. We believe the first two elements are important and it is not necessary to balance each incident with its tit-for-tat response. Cyber conflict can be escalatory even if there is not a direct retaliation (“you did A, so we will do X”) but rather a trend over time (“we caught you doing A and B, and suspect you of C … so we’ll do X and Y and for good measure see no reason to further hold off on Z”). It is through this larger picture, the series of campaigns and capabilities, that the escalatory mechanics become obvious. Despite no provable chain of causation from A to Z, the series can show evidence of intensification and ignored thresholds, if the direction and magnitude of the vector are consistent over a long period of time. A full analysis of escalation requires its own paper, but as an initial analysis we have selected four points each separated by a decade over forty years in order to illustrate this trend: In 1988, nations did not have major cyber organizations. Within the U.S. Department of Defense, there were small groups planning and conducting offensive operations, but there was no dedicated civilian defensive team in the United States until the creation of the Computer Emergency Response Team, funded by the Defense Department, in November 1988. There were significant incidents — such as the Morris Worm of 1988 and a case known as the Cuckoo’s Egg of 1986 which involved German hackers who searched for information on U.S. ballistic missile defense technologies and then passed their findings along to the Soviet KGB. However shocking at the time, those incidents still had quite modest scope, duration, and intensity.[36](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn36) Ten years later in 1998, the world’s first combat cyber unit — established in the U.S. Air Force — had already been in existence for three years, with 93 officers and enlisted.[37](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn37) The first major cyber bank heist was in 1995 against Citibank, while the U.S. military created the first cyber command in 1998 in response to the internal Eligible Receiver exercise and Solar Sunrise incident.[38](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn38) This command was staffed by about two dozen defenders (including one of the authors) and worked with the larger Computer Emergency Response Team and similar teams in the military services to defend against and trace the major Moonlight Maze espionage case to Russia.[39](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn39) Within two years, the command expanded and took on responsibilities to coordinate offensive operations, growing to 122 personnel with a $26 million budget.[40](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn40) Only 10 years after that, in 2008, Estonia suffered a debilitating cyber attack from Russia. Espionage against the United States from Russia became increasingly worrisome, including a case known as Buckshot Yankee, where Russian spies breached classified networks. Chinese theft of intellectual property would be known as the “greatest transfer of wealth in history” by 2012.[41](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn41) In direct response to these incidents, the Department of Defense combined their dedicated offensive and defensive task forces into a single U.S. Cyber Command in 2010.[42](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn42) What had been a defensive-only command with 25 people in 1998 grew to cover both offense and defense with a staff of over 900 by 2011.[43](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn43) In the decade leading up to 2018, the United States launched a sophisticated cyber assault on Iranian uranium enrichment facilities; Iran conducted sustained denial of service attacks on the U.S. financial system; North Korea attacked Sony; and Russia disrupted the Ukrainian power grid in winter (twice) and the opening ceremony of the Olympics.[44](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn44) U.S. Cyber Command grew to 6,200 personnel just in the operational element.[45](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn45) Iran and China created their own cyber commands as did the Netherlands,[46](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn46) the United Kingdom,[47](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn47) France,[48](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn48) Singapore,[49](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn49) Vietnam,[50](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn50) Germany,[51](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn51) and others. If intensification is measured as worsening levels of violence, then cyber conflict has intensified across all periods. By 2018, the problems faced in 2008 seemed minor and the organizations small and limited, while the cyber incidents from 1998 and 1988 appeared positively trivial. Operations that had appeared risky 20 years beforehand were now routine. The intensification trend is also clear according to the measurement of Libicki’s “number of troops committed to the fight.” The Defense Department expanded the central cyber warfighting force from zero troops in 1988 to 25 in 1998, 900 in 2011, and at least 6,200 in 2018. The first commander of the U.S. Cyber Command noted in 2011 that its creation “garnered a great deal of attention from other militaries,” which he hoped was not a sign of militarization but rather “a reflection of concern.”[52](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn52) Nations must indeed be concerned, as there are now dozens of copycats. Jensen, Valeriano, and Maness, using more quantified methods, have similar findings to this qualitative assessment, tracking a strong growth of latent cyber power by Russia and China from 2001 through 2014.[53](https://tnsr.org/2020/09/the-escalation-inversion-and-other-oddities-of-situational-cyber-stability/#_ftn53) There is no obvious evidence pointing to a decrease or even a plateau in the intensity of cyber conflict, or that fewer thresholds are being passed now than 10, 20, or 30 years ago. The direction and magnitude of the change over four decades has marched in only one direction: a relentless increase as nations build their organizations and employ them in more frequent and more dangerous incidents.

#### Actors have the means and motivations to strike critical infrastructure.

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Among critical infrastructure sectors in the U.S., energy is perhaps the most crucial of the 16 sectors defined by the Department of Homeland Security. This sector is so vital because it provides the energy necessary to run every other critical infrastructure sector. However, the U.S. power grid, the backbone of the energy sector, is built upon an aging skeleton that is becoming increasingly vulnerable every day. Whether from terrorists or nation-states like Russia and China, the power grid is susceptible to not just physical attacks, but also to cyber intrusion as well. However, much of this threat can be mitigated if the U.S. takes the appropriate steps to safeguard the power grid and avoid a potential catastrophe in the future. Since Sept. 11, 2001, terrorism on U.S. soil has been at the forefront of American consciousness. Critical infrastructure provides an appealing target because of the disproportionally large impact even a small attack can have on the sectors. In particular, the power grid represents a particularly lucrative target, both in terms of the ease of access and the large impact it can make. The National Research Council stated that the U.S. power grid is “vulnerable to intelligent multi-site attacks by knowledgeable attackers intent on causing maximum physical damage to key components on a wide geographical scale.”[[1]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn1) Additionally, the physical security of transmission and distribution systems is difficult due to the dispersed nature of these key components, which in turn is advantageous to attackers as it reduces the likelihood of their capture.[[2]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn2) From 2002-2012, approximately 2,500 physical attacks occurred against transmission lines and towers worldwide and approximately 500 attacks against transformer substations.[[3]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn3) Terrorists have the motivation to attack the U.S. power grid but the very nature of the grid makes it highly vulnerable. The power grid is not only at risk from physical attacks, but also nation-state cyberattacks. One nation that has shown both the capability and intent to use attacks against critical energy infrastructure is Russia, as demonstrated in their 2015 annexation of Crimea from Ukraine. A Russian cyber threat group known as Sandworm, which used its BlackEnergy malware, attacked Ukrainian computer systems that provide remote control of the Ukraine power grid.[[4]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn4) This attack, and another in 2016, each left the capital Kiev without power, prompting cyber experts to raise concern about the same malware already existing in NATO and the U.S. power grids.[[5]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn5) In any conflict between Russia and NATO, not only would similar cyberattacks pose a threat, but so would potential physical attacks severing fuel oil and natural gas lines to Western Europe. Russia has both the capability and intent to attack critical infrastructure, particularly power grids, during future conflicts in their “hybrid warfare” approach. Another nation that has the capability to attack critical energy infrastructure is China, representing a threat to not just the U.S. energy infrastructure but also that of our allies whose support would be vital in a major conflict. A recent NATO report highlighted this threat from China’s Belt and Road Initiative, stating that “[China’s] foreign direct investment in strategic sectors [such as energy generation and distribution] …raises questions about whether access and control over such infrastructure can be maintained, particularly in crisis when it would be required to support the military.”[[6]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn6) Like Russia, China has been active with cyber intrusions in U.S. energy infrastructure. The Mission Support Center at Idaho National Laboratory characterized these as attacks as “multiple intrusions into US ICS/SCADA [Industrial Control Systems/Supervisory Control and Data Acquisition] and smart grid tools [that] may be aimed more at intellectual property theft and gathering intelligence to bolster their own infrastructure, but it is likely that they are also using these intrusions to develop capabilities to attack the [bulk electric system], as well.”[[7]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn7) China, therefore, has both the capability and intent to conduct cyber intrusions and attacks for myriad reasons. Another arm of this threat is the reliance the U.S. energy industry has on imports from China, especially transformers. In early 2020, federal officials seized a transformer in the port of Houston that had been imported by the Jiangsu Huapeng Transformer Company before sending it to Sandia National Laboratory in Albuquerque. Sandia is contracted by the U.S. Department of Energy for mitigating national security threats.[[8]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn8) The Wall Street Journal reported that “Mike Howard, chief executive of the Electric Power Research Institute, a utility-funded technical organization, said that the diversion of a huge, expensive transformer is so unusual – in his experience, unprecedented – that it suggests officials had significant security concerns.”[[9]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn9) Previously destined for the Washington Area Power Administration’s Ault, Colo., substation, the transformer is believed to have been seized due to “backdoor” exploitable hardware emplaced by the Chinese prior to shipment.[[10]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/#_ftn10) Shortly after these events, President Trump issued Executive Order 13920, “[Securing the United States Bulk-Power System](https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-securing-united-states-bulk-power-system/),” essentially limiting the import of Chinese-built critical energy infrastructure components due to concerns about cybersecurity.[[11]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/#_ftn11) Interestingly, Jiangsu Huapeng “boasted that it supported 10 percent of New York City’s electricity load.”[[12]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/#_ftn12) Franklin Kramer, the former Assistant Secretary of Defense for International Security Affairs, testified before a U.S. House of Representatives Energy and Commerce subcommittee during an energy and power hearing in 2011 and said that a “highly-coordinated and structured cyber, physical, or blended attack on the bulk power system, however, could result in long-term (irreparable) damage to key system components in multiple simultaneous or near-simultaneous strikes.” He added that “an outage could result with the potential to affect a wide geographic area and cause large population centers to lose power for extended periods.”[[13]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/#_ftn13) Even the inclusion of features such as smart grids to the overall grid structure poses new vulnerabilities through their connectivity. Kramer stated that “such connectivity means that the distribution system could be a key vector for a national security attack on the grid.”[[14]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/#_ftn14)

#### Those attacks cause accidental nuclear escalation.

Klare 19, \*Michael T. Klare is a professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association; (November 19th, “Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation”, https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation)

Yet another pathway to escalation could arise from a cascading series of cyberstrikes and counterstrikes against vital national infrastructure rather than on military targets. All major powers, along with Iran and North Korea, have developed and deployed cyberweapons designed to disrupt and destroy major elements of an adversary’s key economic systems, such as power grids, financial systems, and transportation networks. As noted, Russia has infiltrated the U.S. electrical grid, and it is widely believed that the United States has done the same in Russia.[12](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote12) The Pentagon has also devised a plan known as “Nitro Zeus,” intended to immobilize the entire Iranian economy and so force it to capitulate to U.S. demands or, if that approach failed, to pave the way for a crippling air and missile attack.[13](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote12) The danger here is that economic attacks of this sort, if undertaken during a period of tension and crisis, could lead to an escalating series of tit-for-tat attacks against ever more vital elements of an adversary’s critical infrastructure, producing widespread chaos and harm and eventually leading one side to initiate kinetic attacks on critical military targets, risking the slippery slope to nuclear conflict. For example, a Russian cyberattack on the U.S. power grid could trigger U.S. attacks on Russian energy and financial systems, causing widespread disorder in both countries and generating an impulse for even more devastating attacks. At some point, such attacks “could lead to major conflict and possibly nuclear war.”[14](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote14) These are by no means the only pathways to escalation resulting from the offensive use of cyberweapons. Others include efforts by third parties, such as proxy states or terrorist organizations, to provoke a global nuclear crisis by causing early-warning systems to generate false readings (“spoofing”) of missile launches. Yet, they do provide a clear indication of the severity of the threat. As states’ reliance on cyberspace grows and cyberweapons become more powerful, the dangers of unintended or accidental escalation can only grow more severe.

#### Cyber-compromised NC3 causes nuclear war.

Klare 19, \*Michael T. Klare is a professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association; (November 19th, “Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation”, <https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation>)

The Nuclear-Cyber Connection These links exist because the NC3 systems of the United States and other nuclear-armed states are heavily dependent on computers and other digital processors for virtually every aspect of their operation and because those systems are highly vulnerable to cyberattack. Every nuclear force is composed, most basically, of weapons, early-warning radars, launch facilities, and the top officials, usually presidents or prime ministers, empowered to initiate a nuclear exchange. Connecting them all, however, is an extended network of communications and data-processing systems, all reliant on cyberspace. Warning systems, ground- and space-based, must constantly watch for and analyze possible enemy missile launches. Data on actual threats must rapidly be communicated to decision-makers, who must then weigh possible responses and communicate chosen outcomes to launch facilities, which in turn must provide attack vectors to delivery systems. All of this involves operations in cyberspace, and it is in this domain that great power rivals seek vulnerabilities to exploit in a constant struggle for advantage. The use of cyberspace to gain an advantage over adversaries takes many forms and is not always aimed at nuclear systems. China has been accused of engaging in widespread cyberespionage to steal technical secrets from U.S. firms for economic and military advantages. Russia has been accused, most extensively in the Robert Mueller report, of exploiting cyberspace to interfere in the 2016 U.S. presidential election. Nonstate actors, including terrorist groups such as al Qaeda and the Islamic State group, have used the internet for recruiting combatants and spreading fear. Criminal groups, including some thought to be allied with state actors, such as North Korea, have used cyberspace to extort money from banks, municipalities, and individuals.[4](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote04) Attacks such as these occupy most of the time and attention of civilian and military cybersecurity organizations that attempt to thwart such attacks. Yet for those who worry about strategic stability and the risks of nuclear escalation, it is the threat of cyberattacks on NC3 systems that provokes the greatest concern. This concern stems from the fact that, despite the immense effort devoted to protecting NC3 systems from cyberattack, no enterprise that relies so extensively on computers and cyberspace can be made 100 percent invulnerable to attack. This is so because such systems employ many devices and operating systems of various origins and vintages, most incorporating numerous software updates and “patches” over time, offering multiple vectors for attack. Electronic components can also be modified by hostile actors during production, transit, or insertion; and the whole system itself is dependent to a considerable degree on the electrical grid, which itself is vulnerable to cyberattack and is far less protected. Experienced “cyberwarriors” of every major power have been working for years to probe for weaknesses in these systems and in many cases have devised cyberweapons, typically, malicious software (malware) and computer viruses, to exploit those weaknesses for military advantage.[5](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote05) Although activity in cyberspace is much more difficult to detect and track than conventional military operations, enough information has become public to indicate that the major nuclear powers, notably China, Russia, and the United States, along with such secondary powers as Iran and North Korea, have established extensive cyberwarfare capabilities and engage in offensive cyberoperations on a regular basis, often aimed at critical military infrastructure. “Cyberspace is a contested environment where we are in constant contact with adversaries,” General Paul M. Nakasone, commander of the U.S. Cyber Command (Cybercom), told the Senate Armed Services Committee in February 2019. “We see near-peer competitors [China and Russia] conducting sustained campaigns below the level of armed conflict to erode American strength and gain strategic advantage.” Although eager to speak of adversary threats to U.S. interests, Nakasone was noticeably but not surprisingly reluctant to say much about U.S. offensive operations in cyberspace. He acknowledged, however, that Cybercom took such action to disrupt possible Russian interference in the 2018 midterm elections. “We created a persistent presence in cyberspace to monitor adversary actions and crafted tools and tactics to frustrate their efforts,” he testified in February. According to press accounts, this included a cyberattack aimed at paralyzing the Internet Research Agency, a “troll farm” in St. Petersburg said to have been deeply involved in generating disruptive propaganda during the 2016 presidential elections.[6](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote06) Other press investigations have disclosed two other offensive operations undertaken by the United States. One called “Olympic Games” was intended to disrupt Iran’s drive to increase its uranium-enrichment capacity by sabotaging the centrifuges used in the process by infecting them with the so-called Stuxnet virus. Another left of launch effort was intended to cause malfunctions in North Korean missile tests.[7](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote07) Although not aimed at either of the U.S. principal nuclear adversaries, those two attacks demonstrated a willingness and capacity to conduct cyberattacks on the nuclear infrastructure of other states. Efforts by strategic rivals of the United States to infiltrate and eventually degrade U.S. nuclear infrastructure are far less documented but thought to be no less prevalent. Russia, for example, is believed to have planted malware in the U.S. electrical utility grid, possibly with the intent of cutting off the flow of electricity to critical NC3 facilities in the event of a major crisis.[8](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote08) Indeed, every major power, including the United States, is believed to have crafted cyberweapons aimed at critical NC3 components and to have implanted malware in enemy systems for potential use in some future confrontation. Pathways to Escalation Knowing that the NC3 systems of the major powers are constantly being probed for weaknesses and probably infested with malware designed to be activated in a crisis, what does this say about the risks of escalation from a nonkinetic battle, that is, one fought without traditional weaponry, to a kinetic one, at first using conventional weapons and then, potentially, nuclear ones? None of this can be predicted in advance, but those analysts who have studied the subject worry about the emergence of dangerous new pathways for escalation. Indeed, several such scenarios have been identified.[9](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote09) The first and possibly most dangerous path to escalation would arise from the early use of cyberweapons in a great power crisis to ~~paralyze~~ undermine the vital command, control, and communications capabilities of an adversary, many of which serve nuclear and conventional forces. In the “fog of war” that would naturally ensue from such an encounter, the recipient of such an attack might fear more punishing follow-up kinetic attacks, possibly including the use of nuclear weapons, and, fearing the loss of its own arsenal, launch its weapons immediately. This might occur, for example, in a confrontation between NATO and Russian forces in east and central Europe or between U.S. and Chinese forces in the Asia-Pacific region. Speaking of a possible confrontation in Europe, for example, James N. Miller Jr. and Richard Fontaine wrote that “both sides would have overwhelming incentives to go early with offensive cyber and counter-space capabilities to negate the other side’s military capabilities or advantages.” If these early attacks succeeded, “it could result in huge military and coercive advantage for the attacker.” This might induce the recipient of such attacks to back down, affording its rival a major victory at very low cost. Alternatively, however, the recipient might view the attacks on its critical command, control, and communications infrastructure as the prelude to a full-scale attack aimed at neutralizing its nuclear capabilities and choose to strike first. “It is worth considering,” Miller and Fontaine concluded, “how even a very limited attack or incident could set both sides on a slippery slope to rapid escalation.”[10](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote10) What makes the insertion of latent malware in an adversary’s NC3 systems so dangerous is that it may not even need to be activated to increase the risk of nuclear escalation. If a nuclear-armed state comes to believe that its critical systems are infested with enemy malware, its leaders might not trust the information provided by its early-warning systems in a crisis and might misconstrue the nature of an enemy attack, leading them to overreact and possibly launch their nuclear weapons out of fear they are at risk of a preemptive strike. “The uncertainty caused by the unique character of a cyber threat could jeopardize the credibility of the nuclear deterrent and undermine strategic stability in ways that advances in nuclear and conventional weapons do not,” Page O. Stoutland and Samantha Pitts-Kiefer wrote in 2018 paper for the Nuclear Threat Initiative. “[T]he introduction of a flaw or malicious code into nuclear weapons through the supply chain that compromises the effectiveness of those weapons could lead to a lack of confidence in the nuclear deterrent,” undermining strategic stability.[11](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote11) Without confidence in the reliability of its nuclear weapons infrastructure, a nuclear-armed state may misinterpret confusing signals from its early-warning systems and, fearing the worst, launch its own nuclear weapons rather than lose them to an enemy’s first strike. This makes the scenario proffered in the 2018 NPR report, of a nuclear response to an enemy cyberattack, that much more alarming.

#### Cracking down on anticompetitive patent licensing post-*Qualcomm* reintroduces cybersecurity-enhancing competition to the market.

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IV. LESSONS AND POLICY DIRECTIONS The above discussion shows that patent protection can have mixed effects on national security: On the one hand, patents can encourage innovation that ensures domestic technological leadership and produces useful security-protective technologies; on the other hand, patents can stifle innovation-producing and cybersecurity-enhancing competition and can stymie the government’s own ability to achieve national security goals. To navigate the complex effects of patent policy on national security, policymakers may consider the following recommendations as guideposts. A. Anticompetitive Patent Licensing An area of particular concern should be the use of patents and patent licensing strategies to diminish competition or put up roadblocks to new entrants. Policymakers should certainly not support these abuses of the patent system, and indeed should take steps to prevent them. In the mobile communications space, patent licensing already plays an outsized role. There are reportedly between 250,000 and 314,000 patents on the smartphone alone, and litigation over cell phone technologies has lasted decades by now. Patents will thus inevitably have an impact on technologies like 5G or the Internet of Things, so the question is what that impact will be. Patents are supposed to encourage innovation, but research finds that patents alone will not do so; competition is another requirement. A 2015 study considered the impact of competition policy and patent strength on innovation among European firms, measured in terms of research and development spending.183 Initially, the study compared firms in countries with strong patent laws against those in countries with weaker patent laws, and found that patent protection has “no effect on R&D intensity,” a conclusion consistent with multiple other studies.184 However, the study found that when a major competition reform went into effect, strong-patent countries enjoyed a boost in innovation greater than that experienced in weak-patent countries.185 In other words, strong patent protection is complementary to strong competition; the former does not promote innovation without the latter. The practical import of this research is that patent protection is beneficial up to a point, but to the extent that patents—or, more commonly, legal strategies involving patents—overreach to suppress competition, that overreach should be cause for concern. Yet today, strategic patent behavior contrary to competition is prevalent. The Federal Trade Commission’s ongoing lawsuit against mobile phone chip manufacturer Qualcomm, for example, challenges Qualcomm’s practice of refusing to sell chips to any phone manufacturer who does not first pay a hefty sum for patent licenses—even if the manufacturer does not actually have need for all those licenses.186 To the extent that Qualcomm’s “no license, no chips” practice is in fact anticompetitive—that is what the courts overseeing the case will decide—monopolization of that market could substantially harm cybersecurity for the reasons noted above.187 The company’s about-50% market share in the advanced mobile chip market 188 means that there is a virtual monoculture of Qualcomm chips already, and there are ongoing concerns about security vulnerabilities in those chips.189 It is thus puzzling that some have opposed the FTC litigation on the grounds that it is making the United States “less competitive in the global 5G arms race.”190 As one scholar explains, this rhetoric “smacks of ‘national champion’ thinking” and ultimately fails to ensure that “national security warnings are being balanced against competitive imperatives.”191 With respect to emerging information technologies, policymakers should be concerned that a leading firm could undertake similar patent licensing strategies to control the market. Indeed, the district court in the Qualcomm litigation found that Nokia and Ericsson already “have imitated Qualcomm’s practice” because it is “more lucrative.”192

### 1AC---Framing

#### Nuclear conflict is underestimated, while survivors will be agents of destruction

Scarry 19, PhD, Professor of English at Harvard (Elaine Scarry, 2019, Interview, Representations, 146.1)

RA: At the Buffalo conference on pain, you gave a paper that built on some of the insights of your then most recent book, Thermonuclear Monarchy. 1 In the book, you demonstrate the incompatibility of democracy and nuclear arms at least in part on the grounds that, by the nature of their deployment, nuclear arms make it impossible for the populace to consent to their use. In your talk, you made a different but related claim that focused on the relative silence of the population regarding nuclear arms in the post-Cold War era. You were concerned, in particular, with the difficulties of imagining the consequences of nuclear war. I wonder if you could expand on this second point: why it is so hard to think about nuclear war. ES: The two points are deeply related. The architecture of nuclear arms requires that the population be eliminated from the decision about going to war. It also requires that Congress be eliminated from the decision about going to war—just because the nature of the technology requires a tiny number of people to do the launch. The result of that architecture is that people eventually, over seven decades, have internalized the fact that they’re worthless when it comes to the need to defend the country and to carry out acts of mutual aid toward one another. We now simply abandon the right of self-defense and the right of mutual aid and give unlimited injuring power to the executive branch of government and fall silent. RA: How much responsibility, how much blame, does one give to the population for remaining silent? ES: That has always been a question. Gandhi said, ‘‘You can wake a man who’s asleep, but you can’t wake a man who’s pretending to be asleep.’’ His statement marks a fork in the road. If the population has been anesthetized and is genuinely asleep, then they are morally innocent (even if infantilized and terribly reduced as moral agents). If instead the population is pretending to be asleep, we are morally culpable: the population is complicit with the genocide that’s standing in the wings waiting to happen. During my lecture and in many years of working on disarmament, I stressed the first path and tried to outline why waking up is difficult. In recent months, I’ve moved closer to the position that your question identifies, the responsibility of the population. I feel the force of Martin Luther King’s statement, ‘‘There comes a time when silence is betrayal.’’ I’m almost at the point of believing that there is a wanton refusal to [recognize] ~~see~~ the imminent peril, a refusal to understand not just that we have a responsibility to reverse it, to dismantle it, but that we have the ability to do so, and that if we don’t, it is going to happen. I don’t know if it’s going to happen this year. Or whether it’s going to happen this century. But it’s almost inconceivable that it isn’t going to happen. RA: Why is it that people have such a hard time understanding this? If you allow that people might honestly and ardently be trying to understand, what is it that is getting in the way? ES: Four or five answers come to mind. First, people often lack key pieces of information. If you ask someone in this country which nations have nuclear weapons, they are likely to say Iraq (which has none), Iran (which has none), or North Korea (which has fewer than 60; leading experts say fewer than 20). The United States has 6,500. The United States and Russia together own 93 percent of the world arsenal: the other 7 percent is owned by the other seven nuclear states—in order of numerical possession, France, China, the United Kingdom, Pakistan, India, Israel, and North Korea (see fig. 1). An equally profound misconception held by US citizens is the belief that our nuclear architecture is for ‘‘defense’’ and ‘‘retaliation.’’ In fact we have had a ‘‘presidential first-use’’ policy for the whole nuclear age. The profound obscenity of that arrangement, which has only begun to be glimpsed with the current president, has been an equally grave moral wrong from day one. Second, even when American ~~citizens~~ [denizens] and residents have this information, the outcome is derealized by its being future—that is, the unreality something has by having not yet happened is conflated with the unreality something might have by being merely imaginary. People, it’s true, are uninformed. But once they become informed, even then the flash of insight fades from their eyes after about ten minutes. RA: Why do you think that is? ES: Because they think ‘‘future’’ equals ‘‘unreal.’’ But we need to stop and understand what we mean by ‘‘future.’’ If it takes 10,000 steps to put a nuclear architecture into place, 9,999 steps have already been completed: we know how to split the atom; we know how to provide enriched uranium; we know how to deliver the bomb; we’ve completed not only the theoretical steps but the materialization steps: we’ve made the bombs; we’ve completed the delivery systems—Ohio-class submarines, the land-based ICBMs, and airdelivery B-2s and B-52s. Unlike in China and India, the weapons in the United States are already ‘‘mated’’ to the delivery systems; they are on alert; specific weapons have been assigned to specific cities in the countries of present enemies and, yes, even potential enemies. One step remains: the order to launch. So 9,999 steps are present and accounted for; one remains undone. While the 9,999 steps took vast amounts of time and resources, the last one is designed to be carried out in minutes. The word ‘‘future’’ does not apply to the 9,999 steps, only to the last one. When people decline to address the nuclear peril on the grounds that it is an ‘‘unreal’’ worry because ‘‘following the bombings of Hiroshima and Nagasaki it hasn’t yet happened,’’ they are unknowingly allying themselves with the position that our own Department of State and Department of Defense took in 1995. At that time, seventy-eight countries asked the International Court of Justice to declare the possession, threat of use, and use of nuclear weapons illegal on the basis of the humanitarian and environmental instruments such as the UN Convention on the Prevention and Punishment of the Crime of Genocide, the Geneva Protocols, the Declaration of Saint Petersburg, the Vienna Convention for the Protection of the Ozone Layer, the Rio Declaration on Environment and Poverty, and many others. Though the United States worked to invalidate the application of these protocols to our nuclear weapons one at a time, an argument they used over and over was that the firing of the weapons was ‘‘future,’’ hence ‘‘hypothetical,’’ hence ‘‘suppositional’’—this despite the billions of dollars that each year go into polishing and oiling the architecture of earth’s destruction to keep it in a present-tense state of constant readiness. RA: At the conference you also spoke about the problem of ‘‘statistical compassion.’’ ES: Let’s call that the third reason why the population is asleep. American indifference to our own genocidal nuclear architecture comes from the constraints on compassion when large numbers of people [become] ~~stand~~ to be injured. Public health physicians distinguish between narrative compassion (where one or two or three people are at risk) and statistical compassion (where thousands or millions are at risk).2 We’re fairly good at the first, and have many occasions to strengthen our capacity through daily acts of friendship and from reading literature. We’re terrible at the second, and have almost no training in strengthening our feeble abilities in this region. The nuclear peril of course entails the second: recent work on nuclear winter by Alan Robock and his colleagues shows that if even a small fraction of the current world arsenal is fired (one one-hundredth of one percent of the total available blast power), forty-four million people will be casualties on the first afternoon and one billion in the weeks following. The small shrug people make when the subject of nuclear weapons comes up—the little lift and fall of the shoulders—means they have just run a quick check on their interior brain-and-soul equipment and can report: nope, nothing in there in the way of statistical compassion. RA: Narrative compassion and statistical compassion seem to take place in widely separate spheres. How then do you see them coming into conflict with each other? ES: For me, a frightening example occurred in the Bulletin of Atomic Scientists, the wholly admirable body that sets the Doomsday Clock (now at two minutes to midnight) and that works round the clock to educate the people of the United States and the world about the hazards of nuclear weapons. Yet in commemorating the seventieth anniversary of the Nagasaki bombing in August of 2015, they published a historically factual narrative about the pilots of the plane delivering the atom bomb to Nagasaki, how many things went wrong and had to be repaired midflight. The lead-in read, ‘‘A typhoon was coming, the fuel pump failed, they had to switch planes, things were wired incorrectly, they missed their rendezvous, they couldn’t see the primary target, they ran out of gas on the way home, and they had to crash-land.’’ But the worst part was when ‘‘the Fat Man atomic bomb started to arm itself, mid-flight.’’3 The story, narrated in edge-ofyour-seat suspense, is an example of narrative compassion utterly preempting the possibility of statistical compassion: the crew might die, but if they had in fact died over the Pacific, tens of thousands of persons would not have been burned into nonexistence that day. RA: Your emphasis at the conference was on the nature of physical pain itself. ES: Yes, that was my central subject. In terms of our conversation now, we can say that a fourth and fifth reason for indifference arise from the difficulty of comprehending pain, whether it takes place in one person’s body or in the bodies of millions, and whether it occurs in the past, present, or future. (But if I were listing the reasons in the order of importance, these two would be near the top.) Once we exhaust a small handful of adjectives for physical pain, two (and almost only two) metaphors arise: the metaphor of the weapon (one may say it feels as though a knife is sticking in my shoulder blade even if it isn’t); and that of body damage (one may say it feels as though my elbow has snapped in two, even if it hasn’t). The Body in Pain concentrates on problems arising from the first; a later essay (‘‘Among Schoolchildren’’) concentrates on the second.4 Both metaphors, if carefully controlled, can help us understand the felt experience of another person’s pain; but both are highly volatile and can lead us far away from understanding. An example of the benign or genuinely expressive potential is provided by findings in neuroscience that we have mirror neurons that help us recognize another person’s physical pain. When you look at the actual experiments that were done, however, you see that the test subject is asked not to listen to a sufferer’s report of pain but to observe, for example, a pin being stuck into someone’s hand or the administration of a small electric shock. The experiments show not our comprehension of another person’s pain but our recognition of the aversivenes of being subjected to a weapon—often closely related to but by no means identical with physical pain. The very fact that a weapon can be separated from the site of the injury means that the attributes of pain can be lifted away from the sufferer and conferred on the agents inflicting the harm, so now it is not the pain that is world destroying but the inflictor of the pain. There are many examples of this in the case of nuclear weapons. For example, the mushroom cloud is often regarded as ‘‘awesome,’’ some even say ‘‘sublime.’’ But the hibakasha, the survivors in Hiroshima and Nagasaki, say, ‘‘We saw no mushroom cloud.’’ A mushroom cloud is what you see if you’re an observer far away, seated high in the sky in the airplane that dropped the weapon, or standing on the ground scores of miles beyond the radius of the harm. Like any sensible mortal, I admire J. Robert Oppenheimer, but his endlessly quoted statement following the Trinity test, ‘‘I remembered the line from the Hindu scripture ...I am become Death, the destroyer of worlds,’’ allows the scale of the injury to be transferred across the weapon and conferred on the agents, who now perceive themselves as magnificent, thrilling, almighty in their power. Oppenheimer even prefaces the quotation by saying that Vishnu here takes on a multi-armed form ‘‘to impress’’ the prince. The name he chose for the test, ‘‘Trinity,’’ shows this same fabrication of godlikeness. What if instead Oppenheimer had said, ‘‘I remembered the goddess Guanyin whose name means ‘The one who perceives the sounds of the world’ and the sounds I heard were excruciating cries, unbearable shrieks of tens of thousands scalded together in an instant of molten flesh.’’ The first statement is a fiction: Oppenheimer is neither a multi-armed god nor a three-personed god; the second statement (could we hear Guanyin) is accurate; if we could internalize and practice the second statement, we would disarm immediately. The image of the nuclear weapon, which might help make visible the pain and suffering it will bring about, instead captures the gigantic scale of the suffering, only to lift that ‘‘giganticism’’ away from the site of suffering altogether and confer it on the human agents—ordinary men, small in stature and in number, but who now appear gigantic. Insofar as any shred of ‘‘suffering’’ still remains visible, we believe it is the suffering of the nowgigantic human agent who is in mighty peril. Thus the nation spends billions of dollars on a presidential fallout shelter while convincing the public that fallout shelters for the population are ridiculous. In Thinking in an Emergency, and again in Thermonuclear Monarchy, I contrast the Swiss shelter system—Swiss law requires that every house have a fallout shelter;5 the law was reaffirmed in a 2003 referendum that had an 80 percent turnout at the polls—with the staggering constructions that have been made in the United States for... the people? no—for the president and those close to him, a shelter inside a mountain, with buildings and a lake that is, according to observers, large enough for waterskiing. One country, Switzerland, believes in what the Swiss call ‘‘equality of survival’’; the other country, the United States, believes that only the agents of nuclear [disaster] ~~holocaust~~ deserve the chance for survival. Much more detail on the multiple presidential fallout shelters is described by Garrett M. Graff in a recent book, Raven Rock: The Story of the U.S. Government’s Secret Plan to Save Itself—While the Rest of Us Die. The nuclear architecture requires that either the weapon be invisible (buried in a submarine or buried in a cornfield, like the 450 ICBMs) or, when it is visible, it must become the path across which the magnificent prowess of the human agent is seen—he’s so thrilling, so important, so vulnerable; here, please, take my tax money, use all of it to protect the man who will launch our nuclear missiles. What should bring us to our knees in sorrow and shame instead brings about a dutiful salute to the thermonuclear monarch. If one thinks fallout shelters for the population are ridiculous (ignoring the fact that the medically sophisticated Swiss have data showing otherwise), then it is informative to contrast the money lavished on our nuclear architecture with ordinary forms of safety structures for the population like bridges, dams, roads, levees. The American Society of Civil Engineers, in their 2017 report on infrastructure, gave our bridges a ‘‘Cþ’’ (56,000 are ‘‘structurally deficient’’), our dams a ‘‘D’’ (2000 have a ‘‘high-hazard potential’’), our levees a ‘‘D’’ ($80 billion is needed for structural repair), and our roads a ‘‘D’’ (one out of every five miles of highway pavement is ‘‘in poor condition’’).6 Might Americans be given a choice on whether they want their taxes spent on infrastructure or—as is currently the case—on nuclear weapons and presidential fallout shelters? Or has ‘‘no taxation without representation’’ disappeared along with all our other basic democratic principles?(112-118) RA: That all follows from the instability of the weapon; what about the second field of representation, body damage? ES: The phenomenon of body damage is like the image of the weapon but works in a much different way—almost the opposite. Whereas the problem of the weapon is its very separability from the body (and the way to make it benign is to retether it to its referent in the body), the problem of body damage is that it overlaps, overrides, and eclipses the personhood of the one underneath the damage. Either one looks away, or, if one looks, one recoils. Visual artists and writers—from Peter Paul Rubens and Andrea Mantegna in the Renaissance to fin de sie`cle artists Ka¨the Kollwitz, Aubrey Beardsley, Edvard Munch, Joris-Karl Huysmans, to twentieth-century Guatemalan writer Miguel Asturias—all solve this problem by finding a way to double the location, so that personhood remains intact in our perceptual field even if the human body is at that moment being obscenely shredded. 118 Representations If you visit the Nagasaki Atomic Bomb Museum, you will probably find yourself, as I did, surrounded by young schoolchildren, who look with courage on the visages of those who were incompletely incinerated in the bombing of that city (see figs. 2, 3, and 4). In the United States, few adults face up to the faces of those harmed there. In February of 2016, the Central Square Library in Cambridge agreed to let me—and Joseph Gerson, an American Friends Service colleague—do a monthlong program on the bombings of Hiroshima and Nagasaki with weekly lectures and an exhibit of books, drawings, and photographs. The morning after we put up the exhibit, we found all the photographs of injuries had been removed. The effort to put on an exhibit about Hiroshima and Nagasaki at the Smithsonian Institution in 1994 led to such controversy that it had to be canceled—with one exception: the Enola Gay (the plane that delivered the bomb) was put on display. Here we circle back to the phenomenon of the weapon being perceptually severed from the site of the pain. It’s in part because of museums like those in Hiroshima and Nagasaki that so many people in the Japanese population are passionately in support of nuclear disarmament. In preparation for a disarmament demonstration in New York, Cambridge and Boston activists (I include myself) worked for months to bring supporters to the march: after endless work, approximately one hundred did so. But one thousand Japanese men and women arrived that morning in New York; they carried a petition signed by six million of their countrymen, who collectively paid for the travel costs of the thousand who came. RA: Can you provide any examples of authors who ‘‘double the location,’’ as you have just described, ‘‘so that personhood remains intact’’ while the ‘‘human body is being ...shredded’’? ES: Miguel A´ngel Asturias’s Men of Maize begins with a heroic Indian in Guatemala, who ordinarily protects his people no matter what; he is able to do so, in part, because he has a level of sensory acuity that approaches genius. He knows the scent of every flower; he can discern the whole recipe of scents present in the forest in any given moment. The European colonizers can commit a slaughter of his people only if they can divert this heroic leader; and the only way to divert him is to subject him to horrible, scalding, obscene pain. Asturias must convey to us the felt experience of pain, the turning of the body inside out, and he chooses to do this through the associated phenomenon of body damage; but in order to do so without eclipsing the personhood of Gaspar Il´om, he decouples the body damage from the hero. The book opens with a dog, which the invaders have used as a test case for their pain-inducing poison laced with glass. The dog, in excruciating pain, zooms hysterically through the village square, covered with open sores, his penis erect, howling in a way that is aversive to everyone who hears and sees. This horrible scene conveys the obscenity of pain, the obscenity of bodily damage. By obscenity, I mean interior substances in the body which come before us without our consent, come before us before we are mentally prepared to comprehend what we are seeing. But the story separates this bodily desecration from the person, for now, having seen the dog, we need only be told that Gaspar Il´om has drunk this glass-laced poison to understand why he abandons his post, submerges himself in the lake, drinks all its waters, and eventually comes out. He has survived. But during the moments when he disappeared below the surface of the water, his people have been slain. RA: I wonder how you think about the role of the visual in that context. Do you think of the visual as akin to a language? ES: In visual art one can see the same phenomenon taking place, as when Ka¨the Kollwitz refuses to let an injured victim be portrayed as what Shelley called ‘‘a monstrous lump of ruin.’’ In her 1900 etching and aquatint The Downtrodden, she pushes the wounds on the body just beyond the body’s edge onto a linen sheet on which the person is lying. These mouthlike, liplike structures of open wounds are there but are not permitted to compromise figure 4. Photographs of survivors of the atomic bomb in the Nagasaki Atomic Bomb Museum. An Interview with Elaine Scarry 121 our recognition of the sufferer’s personhood. Even somebody like Aubrey Beardsley, in one of his posters, puts the wound in a tree rather than on the body of the woman. And yet the woman has attributes that make the viewer see the analogy, just like Marty South and the trees in your account of Hardy’s The Woodlanders [Scarry is referring to Rachel Ablow’s account in Victorian Pain]. Her posture, for example, is exaggeratedly erect and treelike. She wears a high-waisted skirt that is made to be a visual analogy with the tree. But our perception of her personhood remains uninterrupted. RA: One issue you have raised recently is the particular difficulty of thinking about the specific kinds of injuries caused by nuclear war, namely burns. There was a striking moment in your talk when you discussed the protocols used in burn units to help doctors and nurses in looking at burn victims. It seems so intuitively right that caretakers would have difficulty looking at these patients. It seems to suggest something about the limits on the imagination in terms of suffering. I’m wondering what it is about burns that makes it so hard to imagine the suffering they entail. Is it about the skin as the site of humanity? Is it about the face? ES: It is the visage. Without preparation and help, when we see the complete mutilation of the body, especially the face, we mistakenly feel we are seeing the mutilation of personhood. The ‘‘rule of nines’’ is devised to enable rescue workers to look at a gravely burned person and (instead of having their own minds shut down in sorrow and confusion and revulsion) to assess instantly the gravity of the injury, start appropriate treatment, and report the scale of the injury to the hospital awaiting the person’s arrival. Each part of the body is assigned an easy-to-remember number that is a multiple of nine (see fig. 5). Counting forms a key part in many forms of emergency rescue, and this is one instance. The numbers, once totaled, tell the rescuer the next step, such as whether to insert an IV for fluid resuscitation. The need to train the perceptions of those who hope to help those who are burned is also illustrated by a procedure called ‘‘staying.’’ During the years when I was part of a research group on suffering at the Hastings Center for Ethics, I heard a lecture by a physician-nurse who worked in a burn unit. She mentioned that because of the difficulty oflooking at a severely burned person, nurses assigned to burn units may begin to avert their eyes when speaking with a patient, decline to touch the patient, or stand at a greater distance each day, or request a transfer after a few days. To counteract these problems, caretakers can participate in a class on ‘‘staying’’ where they recognize the temptation to withdraw from the patient and practice trying to overcome that withdrawal. While the ‘‘rule of nines’’ and ‘‘staying’’ are brilliant inventions, we should recognize that in nuclear war there will be few rescue workers and nurses. A study in the Netherlands of what would happen if a terrorist brought into Rotterdam a very small 12 kg weapon (the size used in World War II) found that of those who had not immediately evaporated, four thousand persons would require burn beds.7 They noted that in all of the Netherlands there are only a hundred burn beds. A leading hospital in Boston, Mass General, has seven burn beds. The burn beds themselves—what few there are—will disappear in a nuclear strike. On the floor of the UK Parliament, the possession of four Trident submarines has repeatedly been justified by the potential need to bomb Moscow. In response, a Scottish study by John Ainslie looked at the scale of damage that would actually take place if a nuclear missile were launched against the Ministry of Defense building in Moscow: along with the Ministry of Defense, four major hospitals would be destroyed and four others subjected to fire and radiation that would make them inoperable. Thirty-one schools would also be destroyed with at least 700,000 children slain.8 If the missile is larger, so, too, will the disappearance of hospitals be larger. An article by Steven Starr, Lynn Eden, and Theodore A. Postol in the Bulletin of Atomic Scientists shows that if an 800-kiloton weapon were detonated above Manhattan, the center of the blast would be four times the temperature of the sun, and, within ‘‘tens of minutes,’’ a firestorm will cover 90 to 150 square miles. figure 5. Pocket card showing ‘‘Rule of Nines for Adult and Child,’’ Northwest Healthcare Response Network, https:// nwhrn.org/wp-content/ uploads/2018/08/BurnPocket-Card.pdf. An Interview with Elaine Scarry 123 RA: Was the artistic strategy that you just described of doubling the location so as to protect personhood apparent in the real-world examples you were citing, the Nagasaki children, the ‘‘rule of nines,’’ ‘‘staying’’? ES: I think so. It is not accidental that the Nagasaki Atomic Bomb Museum is itself physically beautiful in its architecture, or that as you enter you pass lavish cascades of paper cranes, inspired by the child Sadako Sasaki, like cherry blossoms in spring, or that you see an inscription about Nagasaki’s exceptional generosity to outsiders—its many centuries of open trade with foreign companies, a level of cosmopolitan hospitality not at that time found to the same degree in other regions of Japan; you see engraved inscriptions from Dwight D. Eisenhower and from the ‘‘United States Strategic Bombing Survey, Summary Report (Pacific War), July 1946’’ saying unequivocally that the atom bomb was not needed to end the war. All these elements, and many others, keep the personhood of the city’s inhabitants in view, side-by-side with the excruciating vision of burnt faces. The ‘‘rule of nines’’ lets one reconstruct the body out of a beneficent invention, toylike in its simplicity. In ‘‘staying,’’ the very name of the procedure holds the injury within the frame of sympathetic personhood. RA: Let’s return to Ghandi’s forking path. You’ve sketched the reasons why the US population is innocently sleeping. But what if they’re feigning sleep? ES: I am sometimes floored by the discrepancy between the attention we give to injuries that have happened when we can’t do anything to change them and the attention we give to injuries that haven’t yet happened when by intervention we absolutely can prevent them. I don’t know how to explain this. I have always assumed that those acts of trying to talk about the pain of torture victims in the 1970s in my case, or the pain of people in World War II, the Holocaust, that those acts are meant to act as a warning to the future. What is our motive for thinking about the unchangeable injuries of the past if not to increase our ability to prevent such injuries in the future? Yet almost incomprehensible is the distance between the willingness to think about events from the past we can’t possibly change and the complete comfort with feeling that future massacres need not concern us. Or worse, that one is slightly superior to protesting a wrong: intellectually superior because the moral wrong is an obvious moral wrong, and we only like to address sophisticated, hard to discern moral wrongs. It might be embarrassing to have to stand on a street corner with a sign or attend a public meeting. Imagine, though, if we forgave the complicity with past acts of enslavement or genocide by saying, ‘‘People saw that it was wrong, but they considered it too intellectually obvious, too compromising of their dignity, to have to stand up and protest.’’ Or take the argument that the aspiration to dismantle nuclear weapons is now many decades old, and we must turn to fresh undertakings: imagine that someone tried to defend those who tolerated slavery in 1860 because they had been hearing antislavery sentiment since 1820 and now considered such sentiments ‘‘stale.’’ We would never give a ‘‘pass’’ to anyone in the past who excused their inattention to slavery or the ~~transfer of people to concentration camps~~ on either of those two grounds; yet we believe such arguments release us from addressing weapons whose outcome is instant genocide. There are historical periods in which people were dissuaded from protesting because dissidents were beaten (Charles Sumner on the floor of the Senate) or killed (Dietrich Bonhoeffer in Germany). No such beatings or death threats excuse our own silence today. RA: Staying with this point about the relative ease of imagining pain past as opposed to pain in the future, do you attribute that to sentimentality? It sounds so reprehensible put in those terms. I wonder how you account for it. ES: I think you are right to worry that our attention to the past begins to look like sentimentality. The argument is sometimes made by academics that sympathy is less about compassion or the desire to ameliorate pain than it is a kind of cultural signaling of our moral goodness. To me that thesis seems horrifying: it lets the many who ignore past pain excuse their own inattention on the grounds that the few who do attend to pain are only doing so to announce their own goodness. So I feel a strong aversion to that argument; it works to reduce still further the number of those who show any wish to help. However, if it turns out that we only speak about irremediable injuries from the past while a huge architecture of massacre [is] ~~stands~~ waiting to be used, then one has to ask oneself: why were we looking at injuries in the distant past? Is it just sentimentality? Is it just cultural signaling?9(124-5)

#### Default to consequentialism

Sikkink 8, Professor of political science at the University of Minnesota (Kathryn Sikkink, 2008, “The Role of Consequences, Comparison, and Counterfactuals in Constructivist Ethical Thought,” <http://www.polisci.umn.edu/centers/theory/pdf/sikkink.pdf)>

Ethical arguments of these different types are ubiquitous and necessary. But because they are also slippery and open to manipulation and misuse, we also need to be very careful and precise about how we go about using them. I would recommend that first we distinguish very carefully between the comparison to ideals and historical empirical comparison. I believe that many critical constructivist accounts rely on the comparison to the ideal or to the conditions of possibility counterfactual argument. In almost every critical constructivist work there is an implicit ideal ethical argument. This argument is implicit because it is rarely clearly stated, but it is found in the nature of the 36 critique. So, for example, in her discussion of U.S. human rights policy, Roxanne Doty critiques a human rights policy carried out by actors who sometimes use it for their own self aggrandizement and to denigrate others. 42 The implicit ideal this presents is a human rights policy that is not used for denigration or surveillance or othering those it criticizes or conversely, of elevating those who advocate it. What would be examples of such a policy? The book does not provide examples. We do not know if examples exist in the world. So the implicit comparison is a comparison to an ideal – a never fully stated ideal, but one present in the critique of what is wrong with the policies discussed. Nicolas Guilhot makes a similar argument in his recent book. The promotion of democracy and human rights, he argues, are increasingly used in order to extend the power they were meant to limit. “The promotion of democracy and human rights defines new forms of administration on a global scale and generates a new political science.” He historically examines how progressive movements for democracy and human rights have become hegemonic because they “systematically managed to integrate emancipatory and progressive forces in the construction of imperial policies.” But once again, the book offers no alternative political scenario. In the final sentence of the book, the author clarifies that “this book has no other ambition than to contribute to the democratic critique of democracy.” 43 In the introduction, he clarifies, “This book does not provide answers to these dilemmas. At most, its only ambition is to highlight them, in the hope that a proper understanding constitutes a first step toward the invention of new courses of action.”44 Ethically, I believe this is a cop-out. Politically and intellectually, I find it too comfortable and too easy. This critique has a crucial role to play in pointing to hypocrisy (as Price highlights in the introduction). It could also serve as a catalyst for policy change in the direction of policy that would include less surveillance or less cooptation of human rights discourse. But it is unlikely to serve as a catalyst for new action or policy change unless it ventures something more than pure critique, unless it risks a political or ethical proposal. Without that, it has the impact of delegitimizing any human rights policy without suggesting any alternative. Any policy to promote human rights of democracy policy is shown to be deeply flawed or even pernicious. It is portrayed as part of the problem, certainly not as offering any kind of solution. Human rights policy appears to make the situation worse, not better. The critique has the effect of telling us clearly what we do not want, what we can not support—human rights policies by imperfect and hypocritical actors like the U.S. In its historical comparisons, it also lumps human rights policy together with colonialism and does not provide any elements to distinguish between one policy of surveillance and other. All are equally flawed. The ethical effect is to remove normative support from existing policies without producing any alternatives. This is similar to what Price means when he says that “critical accounts which do not in fact offer constructive normative theorizing to follow critique ironically lend themselves to being complicit with the conservative agenda opposing erstwhile progressive change in world politics.” Neither Doty nor Guilhot, for example, contrast two human rights policies to give examples of policies that are more of less hypocritical or where there has been more or 44 Guilhot, p. 14. 38 less surveillance. They don’t contrast human rights policies or democracy promotion policies to previous policies that were also hypocritical and self aggrandizing, but more pernicious – e.g. national security ideology and support for authoritarian regimes in the third world. By presenting no contrasts, the critique would appear to say that there is no ethical or political difference between a policy that supports coups and funds repressive military regimes and a policy that critiques coups and cuts military aid to repressive regimes. These policies would appear to be ethically indistinguishable. Indeed, by these standards, a realist policy (a la Kissinger) might be preferable. Kissinger didn’t denigrate his authoritarianism allies. He took regimes as they were. He treated them as valuable allies. He didn’t lecture them on how they should change. He also, in doing so, encouraged, in some cases, coups and mass murder. But at least he didn’t “Other”. Doty and Guilhot give me no ethical criteria to distinguish between the policies of the Kissinger administration, the Carter administration, and current Bush administration policy. Because the comparison is an implicit ideal, never an empirical real world example, the critique is very telling and can delegitimize the critiqued policy. But nothing is put in its place. So, it demobilizes any support we might have for any human rights policy. It puts the analyst in an ethically comfortable position, but by not proposing any explicit comparison, it demobilizes the reader. We learn what to oppose, to critique, but we don’t learn explicitly what to support in its stead. The result can be political paralysis. One finds it difficult to act.

#### Our analysis is uniquely good in the instance of cyberwar — because it hasn’t happened, scholarship must deploy future scenarios and allows us to find external explanatory variables

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Theory Building and Development

The structured analysis of future counterfactuals offers a unique approach for the study of causal effects in social systems. The first category, and perhaps most significant, is the ability of researchers to use scenarios to identify variables of interest and consider ways to measure them. This is an approach sometimes recommended for qualitative research; it consists of writing a notional depiction of what a case study might look like. This exercise helps researchers to think through what variables are of greatest interest, what values those variables might take on, and how they interact to cause values of the dependent variable. Scenario analysis is one way in which researchers may conduct such a notional case study. Rather than introduce a timeless or historical vignette regarding fictional circumstances, the researcher may find it beneficial to place their case in the future. This helps orient the research project toward current and anticipated political issues—thus increasing the relevance of the work—even if the actual case studies are historical. Thinking through the causal process in this way helps the researcher to identify a wider range of explanatory variables, including those that have not yet occurred or may be of very low probability (but are still consistent with existing or proposed theoretical arguments). Scenario analysis also helps the researcher to consider the range of values that the identified independent variables may take on, as exploration of different “worlds” pushes the boundaries of the researcher's predispositions going into the research project. Robust scenario analysis thus helps the researcher to identify the upper and lower bounds of their theory. Second, a commonly cited advantage of counterfactual reasoning that is useful for this process of theory building is a researcher's attempt to manipulate one variable in a causal process while holding others constant, thus isolating the effects of different values of the independent variable on the dependent variable. Manipulating one variable at a time to do a better job of analyzing causal processes is often very difficult to do, as, in the real world, interactions between variables often lead to unpredictable and nonlinear outcomes (Jervis 1997:34–60). For instance, a scholar conducting an analysis of tax rates and other domestic legislation regarding oil may use a counterfactual of a different average oil price in the 1970s. Such a counterfactual would have some fairly obvious implications for the domestic political question, but a world in which that one variable were manipulated would have a large number of equally plausible second- and third-order consequences for regional politics in the Middle East. Those consequences could conceivably feed back into domestic US politics, thus affecting the social system under analysis in a way the researcher may not have controlled for in the original scenario. Despite these acknowledged difficulties in using a “manipulate one variable” approach for the purpose of assaying real-world policy options, it is a useful input to the processes of building theory and research design. The best defense of such an approach is that all forms of modeling involve abstractions from reality, and even highly unrealistic models—such as James Fearon's famous ideal condition in which war should never occur—are useful for studying real events (Fearon 1995). Furthermore, manipulating one variable at a time is more appropriate to some kinds of counterfactual reasoning than others. Consider the three main categories of scenario use: political narratives, game theory and formal modeling, and experimentation. The “manipulate one variable” approach seems least useful to political narratives, which often try to tackle such tough questions as “What is the future of the international system?” Although scenarios offer advantages to developing and extending theory in regard to these sorts of questions, particularly in assessing key drivers and articulating world views (discussed in the next subsections), a scientific approach of controlling for various social factors is unlikely to succeed. In these projects, manipulating one variable at a time serves only to develop one of many possible futures in the interest of extending the range of the theory's explanatory power. On the other hand, the “manipulate one variable” approach offers more direct advantages for formal modeling and experimentation. The reasoning for each follows a comment made by Elinor Ostrom in her 1997 American Political Science Association presidential address. Ostrom suggested that “from…scenarios, one can proceed to formal models and empirical testing in field and laboratory settings” (Ostrom 1998). The experimental method with human subjects benefits strongly from the use of scenarios. In one study of how values factor into Americans' economic decision making, a team of researchers sought to “attribute significant differences in average responses between conditions to the independent variables manipulated in the hypothetical scenario; that is, to the factors intuitive neorealists should weigh heavily and intuitive economists should weigh lightly” (Herrmann, Tetlock, and Diascro 2001). That is to say, one variable related to individuals' world views could be manipulated at once in the experiment, and the researcher may test for the significance of variance between the test and control groups. After using scenarios to better identify variables of interest and the role of their specific values in a causal process, a third category of applications of scenario analysis to theory building is to develop new hypotheses and ways to test them. This follows from using scenarios to identify new independent variables and how their values may effect changes on the dependent variable; each new causal argument may (and should) be expressed as a hypothesis to be tested in the broader research project for which the scenario analysis was developed. Additionally, “day-after” scenarios that seek to walk back the causal processes that may have led to a consequential event are particularly well suited to developing hypotheses (Holmes and Yoshihara 2008). By definition, this type of scenario analysis seeks to discover causal pathways. For instance, one might seek to chart various paths by which a particular type of social revolution may occur in a country of interest. Each narrative of how such a revolution could come to pass would result in at least one hypothesis regarding the links between the many variables of interest. These hypotheses may then be tested against historical data or used to develop new kinds of data collection methods (discussed further in the next section). Finally, scenario analysis helps to explore completely new theoretical projects in a deductive way, whereas a great deal of qualitative work in political science tends to be inductive from the case study method. The use of scenario analysis may help scholars to pursue an “abductive,” or hybrid, method of theory building that draws on both deductive reasoning and insights from cases (Mayer and Pirri 1995). For example, a data-poor research subject, such as how states may respond to computer network attack, has few historical precedents (Mahnken 2011; Rid 2012). If a researcher were interested in identifying the circumstances under which states are more likely to resort to violence in response to cyber attack, he would be confounded by the problem that never in history has a state responded with violence to such an attack. Scenario analysis beginning with the value of violent counter-attack on the dependent variable (the DV being a state's strategy choice) would help the researcher to deduce likely circumstances under which such an outcome may occur. Historical analysis, such as regarding other kinds of information threats, would be helpful for such a project, but the differences between cyber and other kinds of information transmission would result in an incomplete causal narrative based on inductive reasoning alone. Data-Poor Research Topics Scenarios are a useful method for theory building and research design for topics that, despite being of high importance, lack an empirical base. The best example of this type of research is scholarship on nuclear warfare. An enormous literature evolved during the Cold War regarding how a nuclear war might be fought and how escalation dynamics might occur (Kahn 1962; Brown and Mahnken 2011). This literature was based almost exclusively on future counterfactuals, as there were no nuclear wars to study and a very low “n”—consisting of the Cuban Missile Crisis and very few other crises—for publicly acknowledged “close calls” (Sagan 1995). Indeed, in our survey of the use of scenarios in the discipline, more than 25% were about nuclear warfare. Other topics that are of high importance but have a very low or zero “n” include great-power war, global epidemics, climate change, large-scale cyber attack, and weapon of mass destruction terrorism. The points made earlier regarding the identification of new variables and hypotheses are relevant here. In addition to these advantages to new research topics, scenario analysis helps to identify new sources of data. This is partially because scenarios help to identify new independent variables, thus leading the researcher to think about how to measure their values, but also by helping him to think of proxies for measurement when direct observation is not possible. For instance, a day-after analysis of a scenario of interest would cause the researcher to ask what he would have needed to know to predict the occurrence of the future counterfactuals and in turn help the researcher to think about ways in which the discipline could identify that low-probability process if it begins to happen in the real world.

#### Analysis of cyberspace is crucial — our scholarship is part of an iterative process that enables scholars and policymakers to halt future cyberwars

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In one further area of note, this book captures several debates as they stand today, as well as possibly new elements of an emergent lexicon. The chapters with calls for “norms” to be developed and, by inference, imposed by the senior nations of the global deeply cybered community of nations such as the US are part of a widely circulating variety of arguments about how and who might best nurture a less conflictual cybered international system. It is to be expected that this book would reflect those discussions. Several interesting chapters, however, offer new terms useful in decomposing the cognitive and structural complexity of cybered conflict. If the terms capture a complex process in a short form or image such as “lawfare7 ” or “cyber Westphalia,8 ” then a form of ‘semantic infiltration’ slowly alters the perceptions of scholars and activists alike and open up cognitive opportunities for new theorization and new strategic discussions. In particular, Matthew Crosston (“Phreak the Speak: the Flawed Communications within Cyber Intelligentsia”) offers the term, a “Chinese knowledge wall,” to capture the enduring dichotomy between the technically literate and the political systems focused scholars and practitioners long noted by the scholars of the large-scale socio-technical systems (LTS) literature such as Mayntz and Hughes, Comfort, and LaPorte, among others9 . Crosston argues that this dichotomy is particularly influential in an increasingly conflictual cybered international system because the intellectual and cognitive barriers also inhibit progressive cooperation between domestic communities, and inevitably between nations

#### Policy debates over antitrust are valuable

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IV. Antitrust in Civil Society

Competition issues are also part of the general civic discourse separate from the campaign rhetoric and legislative proposals offered by politicians. This is also a significant sign that antitrust has begun to be an important source of small “p” politics that engages substantial segments of the public at large. One example is the increased number of non-technical books intended for a lay audience that deal with the role of antitrust in a healthy economy and democracy. Recent and forthcoming books dealing with these themes include Tim Wu’s “The Curse of Bigness,”109 Matt Stoller’s “Goliath,”110 Maurice Stucke and Ariel Ezrachi’s “Competition Overdose,”111 Zephyr Teachout’s “Break ‘em Up,”112 and David Dayan’s “Monopolized.”113 On the academic side, there are a plethora of government and NGO studies of competition policy on digital competition114 and new works are flourishing which explore the broader ramifications of antitrust and competition in society.115 Long form and more mass-market journalism have also taken up the mantle of exploring the role of antitrust and competition policy. Such diverse magazines as The Atlantic,116 Time, 117 New Republic,118 American Prospect,119 Rolling Stone,120 New York Times magazine,121 Variety,122 National Review, 123 Foreign Policy,124 and other policy and opinion magazines have all run recent stories or profiles of individuals involved in antitrust issues. Before the COVID-19 pandemic effectively monopolized press coverage in the United States, there were thirty-three antitrust related stories on the front page of the New York Times or the front page of its business section over a three-month period in late 2019. 125 A majority of the stories focused on tech giants such as Apple, Microsoft, Google, Amazon, and Facebook.126 In addition, the New York Times also covered stories about mergers, merger policy, local issues such as the Chicago taxi market, and various smaller industries.127 This is separate from coverage during the same period of campaign issues and candidate statements relating to the field. A similar increase in coverage during this same period can be observed anecdotally in more business-oriented publications like Forbes, Barron’s, Wired, and the Wall Street Journal; general newspapers like USA Today, Washington Post, and Huffington Post; more local newspapers; as well as radio and television.128 Web pages and social media accounts on these issues have similarly proliferated on all ideological perspectives.129 Lobbying and public policy groups are growing in number and influence. Beyond the traditional trade associations and general think tanks there are now a number of active groups with antitrust as a large part of their focus. These include the Open Markets Institute, 130 American Antitrust Institute, 131 Anti-Monopoly Fund,132 Institute for Self-Reliance,133 Public Citizen,134 Public Knowledge,135 Demos, 136 and the International Center for Law and Economics.137 At the more technical legal end of the debate, antitrust is similarly flourishing as a field. One sees increased law school hiring in the field for the first time in decades. Academic institutes and centers abound with a wide variety of perspectives ranging from libertarian to enforcement oriented.138 Most major antitrust cases now feature multiple amicus briefs from legal and economic experts on both sides of an issue both in the Supreme Court or the Courts of Appeals.139

Conclusion

Antitrust has always been political in nature. Antitrust law provides broad legal commands dealing with how governments and private individuals can challenge different types of market behavior. In this way, antitrust has not changed. Antitrust will never take the place of sports, the Dow Jones index, or the weather for conversation at the breakfast table, but it has become a meaningful part of the political and policy debate for candidates, the legislature, and important segments of civil society. What has changed, however, is the degree that antitrust has reentered the political arena. Once mostly the domain of technocrats, antitrust issues have been proposed and debated by Presidential candidates, political parties, legislators, pundits, journalists, lobby groups, and voters alike. There are also a flurry of serious proposals and investigations that would make significant changes to the current system if adopted. This is all to the good. Even if none of the current proposals come to fruition, the antitrust debate is part of a broader engagement with political economy issues dealing with fundamental concerns such as economic concentration, globalization, income inequality, social and racial justice, and even recently the proper response to the COVID-19 emergency. The many proposals, initiatives, and pressure groups represent at a minimum the return of antitrust as part of the progressive agenda.

# 2AC

## Case

#### Cyberwar is increasingly likely---SolarWind emboldens hackers to undermine critical infrastructure and nuclear supply chains.

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Cyberattacks are no longer just a matter of cybersecurity, they directly threaten a country’s national security. Cyberattacks alter the character of warfare—much like nuclear weapons once did, allowing adversaries to potentially cross enemy lines to harm large numbers of innocent civilians.

Today’s malicious actors can now seek to cause physical damage from remote locations through digital channels, wreaking devastation on a country at levels that previously would have required a kinetic attack.

On February 8, 2021, hackers breached the Bruce T. Haddock Water Treatment Plant in Oldsmar, Fla. using known software vulnerabilities in an attempt to poison the local water supply with sodium hydroxide—also known as lye. They accessed the plant through its industrial control system (ICS)—a system designed to allow for remote control and supervision of the plant. Taking over the plant’s controls, hackers increased parts of the chemical, used to [adjust the acidity and remove metals from drinking water](https://www.foxnews.com/politics/senate-intel-chairman-florida-water-plant-cyberattack), to one hundred times over the normal level. The system used an [old version of Windows, was accessible with a shared password, and had no firewall protection against intrusions](https://techgenix.com/florida-water-treatment-facility-cyberattack/). Thankfully, [a supervisor noticed the dangerous change in time whilst working remotely](https://www.govtech.com/em/safety/Cyberattack-on-Water-Treatment-Facility-Suggests-More-to-Come.html), averting a crisis that may have caused chemical burns and blindness among those exposed to the toxic chemical.

U.S. government officials have recently expressed concerns about similar vulnerabilities across water and energy sectors and other critical infrastructure including [health, emergency services, food and agriculture, and transportation systems](https://www.foxnews.com/politics/senate-intel-chairman-florida-water-plant-cyberattack). The cyberattack on the water plant occurred just a week before a major winter storm led to a widespread blackout and water crisis across Texas. [More than five million](https://time.com/5939633/texas-power-outage-blackouts/) went without power and running water for several days, illustrating the fragility of such interconnected infrastructure and the physical devastation that could be caused in the event of a cyberattack targeting the grid.

Critical infrastructure is not alone in its vulnerabilities to cyberattacks with physical implications—supply chains are also at risk. For at least a span of months (if not years), hackers have [exploited vulnerabilities](https://en.wikipedia.org/wiki/2020_United_States_federal_government_data_breach) in software from Microsoft, VMWare and the Texas-based company [SolarWinds](https://www.solarwinds.com/) to compromise data security in at least 200 organizations in the U.S. government and other agencies around the world.

Although the SolarWinds attack appears to be a [case of classic espionage by Russia](https://www.securityinfowatch.com/cybersecurity/article/21206223/more-questions-than-answers-as-solarwinds-breach-probe-expands) via the U.S. supply chain, there are aspects of the attack that also illustrate the potential for achieving physical effects via digital channels. As early as [March 2020](https://www.securityinfowatch.com/cybersecurity/article/21206223/more-questions-than-answers-as-solarwinds-breach-probe-expands), Russian hackers breached the Orion network management software designed by SolarWinds, a federal contractor, and planted malicious code likely intended to gain access to sensitive information. Evidence of malware was first detected [in December by a cybersecurity company](https://www.newsweek.com/colorado-representative-says-solarwinds-hack-could-cyber-equivalent-pearl-harbor-1555994) that also uses the Orion software. The impact of the SolarWinds cyberattack spanned [thousands of networks](https://www.securityinfowatch.com/cybersecurity/article/21206223/more-questions-than-answers-as-solarwinds-breach-probe-expands) at [nine federal agencies and 100 private sector companies](https://www.cyberscoop.com/solarwinds-cyber-espionage-russia-neuberger/), including the Department of Energy’s National Nuclear Security Administration (NNSA), which is responsible for overseeing the U.S. nuclear weapons stockpile.

Although NNSA claims there was no impact to classified systems, officials found [evidence of attempted intrusion](http://www.politico.com/news/2020/12/22/nuclear-weapons-agency-congress-hacking-450184) in unclassified systems—although, according to the NNSA Public Affairs office, the system in question was used for business purposes, not for transport of nuclear weapons and materials. The agency also detected attempts to gain access to servers at the Los Alamos National Laboratory—one of three nuclear weapons labs. [NNSA immediately disconnected the software from relevant networks](https://www.energy.gov/articles/doe-update-cyber-incident-related-solar-winds-compromise), removing the possibility for deleterious effects. While hackers were not likely targeting the transport of nuclear weapons, the [vulnerabilities of nuclear weapons](https://www.nap.edu/read/11538/chapter/6#112) [while en-route](https://www.osti.gov/servlets/purl/1409912) [between secure locations](https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1348_web.pdf) are well known.

The exact objectives for the SolarWinds cyberattack remain unclear, but the vast extent of its reach may demonstrate to U.S. adversaries the significant potential of cyberattacks for achieving physical ends, including the possibility of stealing nuclear weapons. However, the incident is not the first major one from which malicious actors have deduced such capabilities—[consider the lessons from the NotPetya attack in 2017](https://spectrum.ieee.org/tech-talk/computing/it/notpetya-latest-ransomware-is-a-warning-note-from-the-future). Russian hackers spread malicious code through a popular accounting software developed by a Ukrainian business across many countries in Europe, eventually infecting tens of thousands of computers around the world. In addition to rendering infected computers useless, the attack shut down the global operations of the Maersk shipping company and caused major traffic congestion on the roads near ports in the United States. It also slowed operations of Merck & Co, Inc., a major producer of drugs and vaccines in the U.S., [reducing production capacity for a short period of time](https://www.fiercepharma.com/manufacturing/merck-has-hardened-its-defenses-against-cyber-attacks-like-one-last-year-cost-it). Even a classic espionage or sabotage incident may carry significant potential for physical damage.

The [Biden administration has already issued guidance](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/02/24/executive-order-on-americas-supply-chains/) for shoring up vulnerabilities in U.S. supply chains, but much more needs to be done to protect critical infrastructure and dissuade malicious actors from exploiting digital channels to achieve physical ends. In an era of hybrid and gray zone warfare, cyberattacks are attractive to nations seeking to undermine their adversaries due to challenges of attribution and the associated benefit of deniability. In the future, these nations may also come to see cyberattacks with physical effects as a new form of warfare—a Trojan horse in the form of their adversary’s own infrastructure or supply chains. In so doing, they can cross enemy lines and cause damage and destruction without defeating any military forces.

## Framing

#### Our nuclear reps are good

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As long as nuclear weapons exist, they will continue to pose a severe threat to the planet and its inhabitants. Whatever helpful role nuclear weapons may have played in deterring great power conflict since World War II, it is difficult to imagine that their benefits are worth the perpetual risk of their use. Any international use of a nuclear weapon—intentional or not, authorized or not—could escalate to a devastating war with unthinkable consequences. A[n] large-scale nuclear exchange would lead to nuclear winter, which would undoubtedly cause horrific mass starvation and could feasibly cause the extinction of the human race. If this danger is ever to be alleviated, policymakers around the world must continue to seek progress on nuclear disarmament. The obstacles to nuclear disarmament are significant. There is a conflict between the security interests of states possessing nuclear weapons, which rely on nuclear deterrence to assure their defense, and the security interests of the world’s population as a whole—which is arguably made less safe overall by the existence of nuclear weapons and the associated risk of nuclear war. Resolving this conflict and creating conditions that allow states to disarm without compromising their security interests is certainly a tall order. But it should not be dismissed as impossible. Instead, emphasis should be placed on developing longer-term approaches that can help to bring about the conditions for disarmament at some point in the future. Efforts should not be restricted to political or strategic thinking on this question. Instead, policy makers should step back and ask themselves: How can we prevent the next generation of leaders from falling into the same paralysis on nuclear disarmament? What can we do today to encourage new and innovative thinking on the political and security challenges of nuclear weapons, five or 10 years down the line?

Our suggestion: Turn to the classroom.

This idea is not a new one. In 2002, the United Nations performed a landmark study on disarmament and nonproliferation education. Sixteen years later, the words of then-Secretary-General Kofi Annan remain timely as ever: “There has never been a greater need for education in the areas of disarmament and non-proliferation… Since the end of the Cold War, changing concepts of security and threat have demanded new thinking. Such new thinking will arise from those who are educated and trained today.” The need for education on nuclear weapons. When it comes to nuclear weapons, the students of today have less lived experience to draw on than older generations. Today’s typical college student was born after the end of the Cold War and has no memory of a time when most Americans were deeply afraid of nuclear war (excluding, to an extent, the fiery exchange of threats between President Trump and Kim Jong-un last year). Perhaps as a result, these students also have very limited knowledge about nuclear weapons. The majority do not have a strong understanding of what nuclear weapons are, their destructive power, or their role in the international order, and even fewer have a sense of how many nuclear weapons exist. They are not aware of the $1.2 trillion nuclear modernization program, in which the majority of costs come from modernizing and improving delivery systems rather than performing the technically necessary maintenance of the nuclear warheads. History education on the Cold War often addresses the US-Soviet arms race of that time, but nuclear weapons issues in other regions—such as the tense situation between India and Pakistan—are rarely ever mentioned. The distant, but persistent, possibility of an unintentional nuclear launch due to unauthorized access, technical failure, or a cyberattack on warning systems, is also overlooked, as is general information about which states possess nuclear weapons today. In short, students in the United States (and likely elsewhere) typically graduate from high school having received almost no information on nuclear weapons. It is generally assumed that today’s American public simply doesn’t care about the complicated and somewhat abstract issues of nuclear weapons and deterrence because they rarely affect people’s lives directly. However, an alternative explanation exists: The American public doesn’t know enough about nuclear weapons to have much political opinion on them, but if they had more knowledge, that could change. If so, educating students on nuclear weapons on a large scale could have the long-term effect of creating an American public that is politically engaged on the nuclear issue and motivated to hold its elected leaders accountable for implementing nuclear policy that reduces the risk of nuclear war. For some students, education on nuclear issues may have an impact beyond just putting nuclear weapons on their radar (pun intended). Today’s students are the next politicians, scientists, and journalists, and some of them will inevitably be tasked with addressing the nuclear issue in their careers. For these students, early exposure to the issues of nuclear weapons in an educational context could be useful preparation for grappling with those issues professionally. Indeed, for some students, learning about nuclear weapons could have a decisive impact on their career trajectory and inspire them to dedicate themselves to solving these problems. An opportune moment. Recently, nuclear weapons and the dangers of nuclear war have begun to re-enter the minds of the American public. The Hawaii false alarm in January of this year, which warned residents of an incoming North Korean missile attack, was not rescinded until 38 minutes after it was issued—and in that time, many people in Hawaii genuinely feared that nuclear war was imminent. The incident highlighted the dangers of technical failure in early-warning systems, but it may also have had a broader effect: bringing the long-dormant fear of a nuclear attack against the US homeland back into the American consciousness. Given the tremendous advances made by North Korea’s nuclear weapons program over the last decade and the public exchange of nuclear threats between President Trump and Kim Jong-un last year, such fears can hardly be called unfounded. The unexpected flurry of diplomacy with North Korea since the PyeongChang Olympics in February has certainly served to quell some of those fears. In particular, President Trump’s unprecedented decision to meet with North Korean leader Kim Jong-un in Singapore this past June marks a meaningful opportunity for progress on denuclearizing North Korea. However, nuclear weapons still pose grave risks, even if an intentional nuclear attack against the United States feels unlikely. The current public interest in the North Korean nuclear issue may present an opportunity to bring forward the less obvious dangers of nuclear weapons, and education offers a promising route to do so. For instance, a course on foreign affairs or security could include a discussion of why North Korea felt the need to develop nuclear weapons, or a physics assignment could ask students to calculate the operational range of North Korea’s missiles, based on their lofted-trajectory missile tests. The authors’ efforts. For our part, the authors have initiated the Massachusetts Institute of Technology Nuclear Weapons Education Project, a grassroots endeavor to help university professors and lecturers introduce relevant information about nuclear weapons into their curricula and course materials at MIT and beyond. The authors have also engaged with MIT’s broader student population by supporting the student organization MIT Students for Nuclear Arms Control, which holds informative events and discussions about nuclear weapons issues for the undergraduate audience. The authors strongly believe that this grassroots model targeting faculty and students can be applied at any university. To that end, Aron Bernstein, professor emeritus in physics, has spearheaded the development of a network of educators at more than one dozen universities who are working to engage their own campuses on the nuclear issue. Expanding and exporting the effort to educate. The authors urge professors and lecturers at universities across the United States and elsewhere to consider what steps could be taken to bring nuclear weapons education to their campus. The MIT Nuclear Weapons Education Project focuses on breadth, seeking to introduce small amounts of nuclear weapons information across as many disciplines as possible to impact the largest possible number of students. But the optimal approach to engaging students on nuclear weapons will vary by campus. Scholars at other universities have focused their efforts on developing and implementing a dedicated elective course focusing on nuclear weapons. Still others are working to introduce or emphasize nuclear issues in existing classes with high registration, across fields like physics, peace and conflict studies, international relations and political science, and history. Any of these models could serve as a starting point for a new campus-wide effort for nuclear weapons education. The pathways to nuclear weapons education that the authors are pursuing and advocating are bottom-up, beginning with a small number of interested individuals devoting personal time and energy to bring nuclear weapons education to their own university communities. Such a model is certainly labor-intensive and requires a meaningful commitment from the initiators in order to be impactful. That said, the potential benefits are well worth the effort, and hopefully these efforts can be replicated and reformed on other college campuses. Reducing the risks of nuclear war will undoubtedly be a decades-long process, but educating future leaders and citizens on those risks is a vital step in the right direction.

## K---Preempts

### 2AC — Preempts K

#### No impact — it’s about preemptive warfare, which isn’t the same as “preempting” args, but they trivialize violence

Brooke 14, (Pete Brooke, 2014, “Irony Alert: Fake Battlefields Give Paintballers an Unrealistic Vision of War,” Wired, http://www.wired.com/2014/11/irony-alert-fake-battlefields-give-paintballers-unrealistic-vision-war/)

Even though construction of these “imaginary battlefields” is informed, somewhat ironically, by photographs of war zones, they are still poor imitations of the topology and environments after which they are named. “Existing images from conflict-zones influence the design and layout of these paintball landscapes,” he says. “They create a more complete façade. This masquerade trivializes warfare and disconnects the general public even further from the wars our volunteer armies face.”

## K---Baylor

### 2AC ⁠— Framework

### AT: 1

#### Maintaining conditions for life is a prerequisite for experiencing death

— edited for potentially problematic language that we don’t endorse

Lawtoo 5, Department of Comparative Literature at the University of Washington (Nidesh Lawtoo, 2005, “Bataille and the Suspension of Being,” linguaromana.byu.edu/Lawtoo4.html)

Bataille's notion of communication involves a dialectic with two positives (hence a non-dialectic) where two sovereigns confront death not in view of an end but as an end in itself: "confronting death," in fact, "puts the subjects at stake-"l'être en eux-mêmes [est] mis en jeu" (Sur Nietzsche 61). Further, Bataille affirms that "[p]ersonne n'est-un instant-souverain qui ne se perde" (OC VIII 429). It is the Nietzschean self-forgetfulness that is here evoked; a self-forgetfulness which implies a transgression of the limits of both communicating subjects. Again, for Bataille "[l]a 'communication' n'a lieu qu'entre deux êtres mis en jeu-déchirés, suspendus, l'un et l'autre penchés au-dessus de leur néant" (Sur Nietzsche 62). However, if according to Nietzsche, self-forgetfulness takes place in solitude, for Bataille it necessitates the presence of an "other."(5) Communication in fact, asks for "deux êtres mis en jeu" who participate in what he defines as "une fête immotivée" (Sur Nietzsche 31). There the sovereign loses himself (se perde) with the other, through the other, in the other, in a process of "mutual laceration" (Essential 105) which is simultaneously tragic and ludic. The emphasis on the other is Hegelian, but unlike dialectics, communication does not confront the subject with an object (Gegen-stand, something that stands against the subject). As Bataille puts it (apparently echoing Baudelaire), communication takes place with "un semblable," "mon frère" (OC VIII 289). And he adds: "Cela suppose la communication de sujet à sujet" (OC VIII 288). Bataille's notion of communication is not based upon a "violent hierarchy" (Derrida's term) but rather upon egalitarianism. Moreover, transgressing the limits of the subject implies that the two subjects already possess (in potential) the characteristics of sovereignty. Hence, the status of sovereign is not achieved as a result of a fight to the death, but requires the subject to be open to an other who is outside the limits of the self. Derrida speaks of the "trembling" to which Bataille submits Hegelian concepts (253). This trembling, I would argue, has its source in Nietzsche (6): "The figs fall from the trees" says Zarathustra, "they are good and sweet, and when they fall, their red skins are rent. A north wind am I unto ripe figs" (qtd. in Philosophy 135). If we apply this passage to Bataille's philosophy, we could say that inherent in this "fall" is an explosion of Hegelian concepts, and in particular, as we have seen, the notion of Herrshaft. Further, communication, for Bataille, involves a similar "fall" which rents (déchire) the skin of the subjects (their limits) exposing the red flesh which lies beneath the skin. According to the French philosopher, Nietzsche's critique of the subject is more radical than Hegel's, since, as he puts it in "Hegel, la mort et le sacrifice," Hegel's philosophy, and I would add Kojève's interpretation of it, is "une théologie, où l'homme aurait pris la place de Dieu" (OC XII 329). Hegel's "theology" preserves the identity of the subject. Now, Bataille makes his position to this "theology" clear as he writes: "I don't believe in God-from the inability to believe in self" (Essential 10). By establishing a direct link between the death of the subject and the death of God, Bataille extends his critique of "beings" into the larger, ontological, critique of "Being." Implicit in this theoretical move is the articulation of the ontology of sovereignty. Bataille's philosophy is Nietzschean insofar as it is grounded in experience and in the immanence of the body. Communication, for Bataille is first and foremost a bodily affair. Hence the interrogation of the limits of the subject starts from an interrogation of what we could call the "gates," or openings of the body: the mouth, the vagina, the anus and the eyes are for Bataille central places for philosophical investigation because at these gates, the integrity of the subject is questioned; its limits can be transgressed. They are spaces of transition where a "glissement hors de soi" (OC VIII 246) can take place. These bodily openings, which Bataille also defines as "blessures," (Sur Nietzsche 64) found his conception of the sovereign subject. In fact, each "blessure" can be linked to a specific dimension of communication which obsesses Bataille. His central themes match different bodily openings: the mouth connects to laughter; the vagina to eroticism; the eyes to tears; the anus to the excrements which he links to death. Through these openings the subject is traversed by different fluxes and its integrity, totality and stability is challenged. They allow for the possibility of a glissement of the subject's being. The same could be said of Bataille's corpus: it is a unitary entity, which, like a body, escapes the totalizing temptation of closure. Despite the fact that Bataille defines sovereignty in terms of the Kojèvian/Hegelian "nothingness" (Bataille's Rien), his conception of communication is built upon the Nietzschean ontological distinction between the Dionysian and the Apollonian. In fact, the ontological movement that takes place in communication "exige que l'on glisse" (OC VI 158) from an "insufficient" and "discontinuous" being to a reality of "continuity" that transcends binary oppositions (Erotism 13-14). To put it more simply, communication introduces a movement from the "many" to the "One"; from a "discontinuity of being" to a "continuity of being;" from separate "beings" to a common ontological ground ("Being"). The source of Bataille's ontology is clear: it stems from Nietzsche's The Birth of Tragedy which in turn, is construed upon Schopenhauer's distinction between will and representation. "As a sailor sits in a small boat in a boundless raging sea," writes Schopenhauer," surrounded on all sides by heaving mountainous waves, trusting to his frail vessel; so does the individual man sit calmly in the middle of a world of torment, trusting to the principium individuationis" (Birth 21) .(7) Communication, for Bataille, as the Dionysian for Nietzsche, involves the shattering of the principium individuationis, a tearing down of the veil of Maya which constitutes, what Bataille calls, with a blink of the eye to Schopenhauer, the "illusion of a being which is isolated" (Essential 10; my emphasis). Communication, thus, involves an opening of the subject to the larger ground of Being. The sovereign's boat is constantly leaking. Yet, in order for communication to take place, the boat needs to keep floating. That is to say that for transgression to take place, the limits of the subject need to be preserved (Erotism 63; Foucault 34). The being of the sovereign subject is suspended upon the abîme-what Bataille also calls "une realité plus vaste" (OC II 246)-which means that the subject neither dwells safely within the limits of the "small, insufficient boat" of individuation, nor within the depth of the undifferentiated "raging sea," but in the space of contact in-between the two spheres. This precision is key in order to delineate the originality of Bataille's ontology of sovereignty. Bataille's conception of the communicating subject (i.e., of sovereignty) walks a thin line between its self-dissolution and its self-preservation. Hence the idea that he is above all a thinker of limits or borders. The sovereign's being, in fact, is "suspended" on the "bord de l'abîme" (Coupable V 355) but never actually falls, except, of course, in death. Hence, for Bataille, "[i]l s'agit d'approcher la mort" [it is approaching death] that is to say, the abîme, or the continuity of being, "d'aussi près qu'on peut l'endurer" [as close as one can endure] (337-338). The sovereign subject confronts death while preserving his life. His being is placed at the border between life and death. Hence, if Bataille defines philosophy as "existence striving to reach its limits" (Essential 146), it should be specified that the being of the subject is not found beyond its limits, as his use of "existence" seems to suggest (Ek-sistenz) since that would imply a total dissolution of the subject. Bataille's philosophy of transgression implies the preservation of the limits of the subject so that the sovereign can experience and endure death in life. The tension between self-expenditure (Nietzsche's Verschwendung) and self-preservation (linked to Hegel's Anerkennung) is analogous to the movement of a moth that is first attracted by the fire of a candle and subsequently distances itself from the fire in order to preserve its life.(8) This repeated back and forth movement recapitulates the movement of communication and is responsible for the underlying tension which traverses Bataille's philosophy. It is an inner (bodily) drive that attracts the moth to death and not, as it is the case for Hegel's master, a reasoned project in view of an end (recognition). The moth's self-sacrifice, in fact, is perfectly useless (it serves no purpose) and hence is truly sovereign. Bataille would call it "une négativité sans emploi." Or, as he says with respect to eroticism in his first and last interview before he died, "it is purely squandering, an expenditure of energy for itself" (in Essential 220). This movement forwards, towards the flame of self-dissolution (which takes place in death, eroticism, laughter…) and its retreat backwards, towards life and the limits it involves, epitomizes Bataille's notion of communication. A practice which for Bataille seems to have the characteristic of a fort-da game in which the subject is not in control of the movement. This movement, Bataille writes in the Preface to Madame Edwarda, happens "malgré nous" (III 11). Thus conceived the sovereign accepts the place of a toy in the hands of a child playing-a definition similar to Heraclitus' vision of life, which he defines as "a child at play, moving pieces in a game (Fragment 52, in GM 149). This view of communication is both tragic and joyful; violent and useless. A joyful tragedy, which challenges the limits of the subject; that puts the subject's being en jeu. If Bataille is deeply fascinated by death, decay and the dissolution of the subject in a continuity of being, he escapes the temptation to embrace death at the expense of life. His definition of eroticism sums up this fundamental tension: "Eroticism," he writes, "is assenting to life up to the point of death" (Erotism11). This applies not only to eroticism but also to all communicating activities such as laughter, play, tears, and ultimately to the ethos that sustains the totality of Bataille's philosophy. If Kojève defines dialectics as a "negating-negativity" (5), Bataille's communication can be read as an affirmative negativity. In fact, death is confronted and even invoked, but what is found in death is the ultimate affirmation of life. Negation of the integrity (the limits) of the subject leads to a radical affirmation of life. And if in the Preface to Madame Edwarda, Bataille can affirme "l'identité de l'être et de la mort" (OC III 10), let us also note that the identity of being and death is realized in life. Faithful to Nietzsche, Bataille does not become a negator of the will; a negator of life; a pessimist, a Buddhist or worse, a nihilist (some of the derogatory terms used by Nietzsche to retrospectively define his first and last master). Bataille remains truthful to life. While the ontological premises grounding sovereignty are taken from Schopenhauer (via Nietzsche), Bataille's conclusions are diametrically opposed to Nietzsche's first master. In fact, Bataille's philosophy can be seen as an affirmation of the will (he operates an inversion of values) through Dionysian practices (included sexuality which Schopenhauer condemned) that put the subject in touch with the ultimate ground of being, without dissolving ~~him/her~~ in it.

### 2

#### Globalization is immensely beneficial for the Global South and widely supported.

Horner et al. 18 (Rory, Global Development Institute, University of Manchester, Manchester, UK, “Globalisation, uneven development and the North–South ‘big switch’,” Cambridge Journal of Regions, Economy and Society 2018, 11, 17–33 doi:10.1093/cjres/rsx026)

Citizen surveys further reveal dramatic changes in attitudes to globalisation across and within the global North and South. While such surveys have methodological limitations,1 the results indicate distinctive trends that support the thesis of the ‘big switch’. Among people in the global South, polls have consistently found quite positive attitudes towards globalisation. In 2007, the Times of India claimed that ‘Indians believe globalisation benefits their country’, citing a poll by the Chicago Council on Global Affairs and World Public Opinion that 54% of Indians answered ‘good’ compared to 30% ‘bad’ to the question of whether increasing economic connections ‘with others around the world is mostly good or bad’. More recently, Stokes (2016) reported on Pew Research Surveys from 2016 which found that 60% of Chinese think their country’s involvement in the global economy is good (compared to 23% who think it is bad), while 52% of Indians surveyed thought it was good compared to 25% who said it was a problem. A recent YouGov survey of 20,000 people across 19 countries found a majority believed that globalisation has been a force for good. That survey found the most enthusiasm for globalisation in East and South-East Asia, where over 70% in all countries believed it has been a force for good. The highest approval, 91%, was in Vietnam, a relative latecomer to globalisation (Smith, 2017).

By contrast, public support for globalisation in the global North has plummeted. Bhagwati (2004) cited an Environics International Survey presented at the 2002 World Economic Forum Meetings to argue that disillusionment with globalisation was not universal; ‘anti-globalisation sentiments are more prevalent in the rich countries of the North, while pluralities of policy makers and the public in the poor countries of the South see globalisation instead as a positive force’ (2004, 8). Although Bhagwati suggested this was an ‘ironic reversal’, it proved to be in line with a 2007 BBC World Service poll that found 57% of people in G7 countries thought the pace of globalisation was too rapid, whereas the majority of those in ~~developing~~ countries surveyed thought it was just right or too slow (e.g. IMF, 2008; Pieterse, 2012). A 2007 Pew Global Poll similarly found a decline in the percentage of people in many Northern countries who believed trade had a positive impact. In its analysis of the survey results, Kohut and Wilke (2008, 6–7) commented that ‘it is in economically stagnant Western countries that we see the most trepidation about globalisation’. Almost 10 years later, The Economist (2016) reported on a YouGov survey of 19 countries, which found that fewer than half of people in the USA, UK and France believed that globalisation is a ‘force for good’ in the world. This broad change in attitude toward globalisation is playing out in national electoral politics as well as gatherings such as the World Economic Forum and the meeting of the Asia-Pacific Economic Cooperation.

The ‘big switch’ and the geography of uneven development

The ‘big switch’ seemingly confounds the predictions of the most vocal proponents and critics of globalisation alike. Uneven development is dynamic and relates to differences both within and among countries (Sheppard, 2016). Naïve claims that the world is flat or that economic globalisation is ‘win-win’ have rightly been dismissed (Baldwin, 2016; Christopherson et al., 2008; Turok et al., 2017), yet it is also insufficient to suggest that globalisation simply leads to a reproduction of existing inequalities, overlooking how that unevenness may be changing as a result of new macroeconomic geographies (Peck, 2016). While trade theory could predict that there would be ‘losers’ in the global North from international economic integration, proponents of economic globalisation have asserted that they would be few in number and could be compensated. More recently, it appears that a large group of people feel more forsaken than compensated. Similarly, for those who embraced Marxian political economy, and warned of its negative consequences in the South, the apparent optimism and support for globalisation in the South may have been unexpected. The sceptical internationalists (e.g. Evans, 2008; Kaplinsky, 2001; Stiglitz, 2006) should be acknowledged, however, for forecasting downsides in the global North. As we outline below, many people in the global North have experienced relative stagnation, whereas, albeit from a very low starting point and amidst considerable inequality, many people (but not all) have experienced improved development outcomes in the global South. We then explore what this apparent ‘big switch’ may tell us about contemporary economic globalisation.

The new geography of global uneven development

Significant portions of the population in the USA and other countries in the global North have experienced limited, if any, income gains in an era of globalisation. Milanovic’s (2016) ‘elephant graph’ (Figure 1) has quickly become a popular way to demonstrate the relative stagnation experienced in North America and Europe in recent decades. Exploring changes in real incomes between 1988 and 2008, he showed that those who particularly lost out on any relative gain in income were the global upper middle class (those between the 75th and 90th percentiles on the global income distribution) and the poorest 5% of the world population. Of these least successful percentiles, 86% of the population were from mature economies in the global North (Lakner and Milanovic, 2016, 23). Considering these contrasts more widely, a growing body of evidence shows that the global North’s dominance in the global economy is receding, with the share of high-income countries in global GDP having fallen from 76.8% in 2000 to 65.2% in 2015 (see Figure 1).

A different picture emerges in the global South. In Figure 1, it was Asians who comprised 90% of the population in the percentiles which did best in terms of relative income gains from 1988 to 2008 (Lakner and Milanovic, 2016, 223). The UNDP has remarked that

A striking feature of the world scene in recent years is the transformation of many ~~developing~~ countries into dynamic economies…doing well in economic growth and trade … they are collectively bolstering world economic growth, lifting other ~~developing~~ economies, reducing poverty and increasing wealth on a grand scale. (UNDP, 2013, 43)

The share of global GDP of low and middle income countries increased from 22.5% in 2000 to 34.1% in 2015 (Figure 2). Much of this increase is accounted for by China, as well as India and Brazil. Their share of global GDP, only 4.6% in 1960, 6.6% in 1990 and 9.3% in 2000, had almost doubled in the 21st century to 18% by 2015.

The development context of the global South has changed significantly since the turn of the Millennium, across a variety of important indicators. The total number of people in the world living on less than $1.90 per day (i.e. extreme poverty) has more than halved from 1.69 billion in 1999 to 766 million in 2013. At least by official estimates, the share of the population in the global South who are living in extreme poverty has fallen considerably this century. Whereas the percentage of the population in the global South with a daily consumption level of less than $1.90 was 33.4% in 1999, it was just 13.4% in 2013.2 The percentage of the world’s countries classified by the World Bank as low-income, albeit a very low threshold, more than halved within the first 15 years of the 21st century. Moreover, the total number of countries which are highly dependent on aid (having a net ODA > 9% of GNI) has fallen considerably, from 42 in 2000 to 29 in 2015, or from 34.1% to 23.2% of all low and middle-income countries with data available over that period.3

Considered overall, in comparison with the 1990s, the global South, in aggregate, now earns a much larger share of world GDP, has more middle-income countries, more middleclass people, less aid dependency, considerably greater life expectancy and lower child and maternal mortality. Table 1 provides some summary indicators for high-income countries (HICs) and low and middle-income countries (L&MICs), as somewhat imperfect approximations for global North and South.

After two hundred years of a ‘divergence, big time’ (Pritchett, 1997) between developed and ~~developing~~ countries following the Industrial Revolution, recent measurements suggest a change in the pattern of global inequality across a number of indicators (Horner and Hulme, 2017). The Global GINI of income distribution across all individuals in the world has fallen from 69.7 in 1988 to 66.8 in 2008 and 62.5 in 2013 (World Bank, 2016, 81). Analysis presented in the World Bank’s Taking on Inequality (2016) suggests that, in 1998, 26% of global income inequality was related to differences within countries, with the remaining 74% relating to differences among countries. By 2013, these shares were 35 and 65%. Two hundred years of a great divergence between global North and South now seems to have had some reversal, although more than half of an individual’s income can be accounted for by the country where he/she lives or was born (Milanovic, 2013). Inter-country inequality, rather than intra-country inequality, is still dominant, but it accounts for a diminished share of income-based and other inequalities (World Bank, 2016).

#### Capitalism is economically decolonizing now.

Smith 21, \*Noah Smith, Bloomberg Opinion columnist. He was an assistant professor of finance at Stony Brook University, and he blogs at Noahpinion; (April 2nd, 2021, “Against Hickelism”, https://noahpinion.substack.com/p/against-hickelism)

What Hickel gets wrong is his idea that Western powers, libertarian ideology, and international institutions have conspired to keep poor countries from adopting mixed approaches to their economies. In fact, activist state policies are quite common, and have contributed substantially to the poverty reduction documented above.

For example, take India. Dani Rodrik and Arvind Subramanian, in [a 2004 paper about India’s growth surge](https://www.imf.org/external/pubs/ft/staffp/2004/00-00/rodrik.pdf), write the following:

Most conventional accounts of India’s recent economic performance associate the pick-up in economic growth with the liberalization of 1991. This paper demonstrates that the transition to high growth occurred around 1980, a full decade before economic liberalization. We investigate a number of hypotheses about the causes of this growth—favorable external environment, fiscal stimulus, trade liberalization, internal liberalization, the green revolution, public investment—and find them wanting. We argue that growth was triggered by an attitudinal shift on the part of the national government towards a pro-business (as opposed to pro-liberalization) approach. We provide some evidence that is consistent with this argument. We also find that registered manufacturing built up in previous decades played an important role in influencing the pattern of growth across the Indian states.

In other words, India didn’t just liberalize things; it implemented its own version of a development state, and prospered as a result. The same is true of Southeast Asia, where Malaysia, Thailand, and to a lesser degree Indonesia have emerged as success stories and [have relied thoroughly](https://core.ac.uk/download/pdf/303071859.pdf) on development states and industrial policy. See Vietnam’s recent growth for another example.

In Latin America, it’s true that the Washington Consensus [slowed down structural change and productivity growth](https://rodrik.typepad.com/dani_rodriks_weblog/2010/06/the-most-telling-chart-i-have-seen-in-a-long-time.html). But that doesn’t mean Latin American governments had no role in reducing poverty. Bad advice may have held back the development state in Latin America, but governments there have engaged in extensive redistribution and better education.

A [series](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2304715) of [papers](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226538) by Nora Lustig, Luis F. Lopez-Calva, and Eduardo Ortiz-Juarez documents these policies. Inequality in Latin American countries fell substantially during the 2000s:

Lustig et al. find that roughly half of this was due to government transfers and pension policies, while the other half was due to increasing incomes for workers at the bottom of the distribution — which in turn was due to better education. So Latin American governments, though they didn’t pursue the kind of manufacturing-intensive, export-led development policy used by many Asian countries, did manage to cut poverty with government action.

#### Capitalism net alleviates poverty.

Lazear 20, \*Edward P. Lazear was the Morris Arnold and Nona Jean Cox Senior Fellow at the Hoover Institution and the Davies Family Professor of Economics at Stanford University's Graduate School of Business.;(May 26th, 2020, “Socialism, Capitalism, And Income”, https://www.hoover.org/research/socialism-capitalism-and-income-0)

First, there is no evidence that, as a general matter, high-income groups benefit more from a move toward capitalism than low-income groups. The effect of changing state ownership and economic freedom on income is not larger for the rich than for the poor. Second, income growth is positively correlated across deciles. The situation is closer to a rising tide lifting all boats than to the fat man becoming fat by making the thin man thin. Finally, there is no consistent evidence across the large number of countries and time periods examined of any strong and widespread link between income growth and inequality. There are examples, like China, where income growth was coupled with large increases in inequality, but others like Chile, where strong income growth came about without much change in inequality, and South Korea, where inequality declined slightly as economic freedom and income grew over time.

Transfers and redistribution present the most complex picture of state involvement.

Transfers from rich to poor through the tax system are a luxury that only rich countries seem to be able to afford and are not a product of socialism per se. There is a very high correlation (-.67 in 2010) between contemporaneous median income and the low transfer index across countries.

High transfer countries like those in Scandinavia and other rich parts of Europe have primarily private ownership and economic freedom more like what prevails in the United States than in socialist countries. The poor definitely—and unsurprisingly—seem to benefit from higher transfers at a point in time. But the high taxes that generally go along with transfers do result in low income growth for median and high-income groups within a given country over time.

A similar pattern exists with respect to rule of law. The contemporaneous relation of rule of law to income is strong, but this seems to reflect the fact that countries that are wealthy demand rule of law rather than the reverse. Low state ownership at a point in time is a more consistent predictor of income growth within a country over the following decade than is rule of law at that same point in time.

Finally, not all transitions are alike. The Eastern European countries and the former Soviet Union saw large transitory declines in incomes for all groups during their transition to the market and the poor were more adversely affected than the rich. In China, and to a lesser extent India, market reforms brought about almost uninterrupted income growth. Venezuela provides an opposite example, moving from a more market-oriented economy to a socialist one.

Inequality fell slightly, but income growth was low for all groups and the poor have not regained the income levels that they had at the peak during the 1990s. The evidence suggests that it is economic shocks rather than transitions that disproportionately affect the poor. Transition from a command structure to the market is but one example of such a shock.

In sum, most income groups benefit from moves away from socialist command structures to free-market capitalism, but transfers can at least in the short run improve the well-being of those worst off.

### 1NC---AT: Intervention

#### No endless intervention.

Mazarr 20, PhD @ Maryland, MA @ Georgetown, senior political scientist @ RAND. (Michael J., “Rethinking Restraint: Why It Fails in Practice”, *The Washington Quarterly*, 43:2, pg. 12-14, Accessible at: <https://doi.org/10.1080/0163660X.2020.1771042>)

An Inconsistent Urge to Transform the World

In his most recent book, eminent realist John Mearsheimer defines US hegemonic aspirations in especially absolute terms, specifically regarding the promotion of liberal values. The focus of Mearsheimer’s ire is liberal hegemony, which he defines as “an ambitious strategy in which a state aims to turn as many countries as possible into liberal democracies like itself while also promoting an open international economy and building international institutions” through “an active policy of regime change.” Liberal hegemony thus inevitably becomes a “highly interventionist foreign policy that involves fighting wars,” “doing significant social engineering in countries throughout the world,” and “toppling autocracies” which, according to Mearsheimer, results in an “abysmal record of failure.” 29 Stephen Walt joins Mearsheimer in condemning the pursuit of such liberal hegemony as a “costly failure.” 30

It is not clear at what country this critique is aimed, but it certainly is not the United States. During the Cold War, of course, many criticized US foreign policy specifically for embracing many dictatorships—from Pinochet’s Chile to the Shah’s Iran to authoritarian governments in Guatemala. Since the Cold War’s end, the United States has had active regime change policies aimed at only a handful of states. Even with regard to some of these, the record is full of swerves: the United States infamously toyed with engaging Saddam Hussein’s Iraq in the 1980s before gradually sliding toward an unofficial regime change policy by the late 1990s. (Even after fighting Saddam Hussein’s Iraq in the Gulf War, the Bush administration famously decided not to overthrow him, a decision that reflected a remarkable degree of restraint.31) US regime change ambitions with both Iran and Cuba were effectively shelved by the Obama administration (even if revived, at least with Iran, by the Trump administration).

The United States has persistently encouraged the gradual advance of liberal values through more patient means such as broad-based engagement, support for human rights activists, and investments in civil society organizations. But these indirect, long-term approaches are a far cry from the vision of a militarized liberal hegemony.

As an example of the gap between this caricature and actual US policy, consider the US approach to the roster of autocratic states in 1990. Many of these were clustered in Africa; the United States called for improved human rights policies on the continent but had no real, active regime change policies toward any of these governments. Globally, Washington counted many regimes then defined as illiberal—including Saudi Arabia, Oman, Indonesia, Egypt, and Morocco—as friends. It was busily embracing a policy of engaging China, the world’s biggest autocratic regime, and would soon be on the road to mending ties and eventually initiating a strategic partnership with Vietnam. The direct clashes that did exist with autocratic states (largely Cuba, Iran, Iraq, and North Korea) were the product of specific histories or aggressive behavior on the part of these regimes, not any generalized crusade against illiberalism.

To be sure, dreams of liberal value promotion have always inspired US goals and have ornamented some US policies since 1945. The rise of the Responsibility to Protect (R2P) and related interventionist doctrines in the 2000s did help produce what may be the single example of an intervention prompted largely by such considerations—the European and US action in Libya in 2011. Even here, that outcome followed a US effort to embrace the regime: when Washington secured Libyan promises of nonproliferation in 2003, it was happy to remove sanctions on Muammar Qaddafi’s government and move toward rapprochement without much attention to human rights. Washington presumably hoped that such engagement would produce reform and change, but this slow, steady, peaceful approach to value promotion is presumably just the sort of alternative to militarized hegemony that restraint advocates would want. Beyond Libya, the allegedly belligerent approach to liberal hegemony has been evident in remarkably few cases.

To some degree, Mearsheimer is actually making an argument about a momentary period of surplus power, not more perennial motives behind US strategy. He claims that it is not merely a liberal hegemonic impulse that has produced US interventionism, but the fact that “the United States was so powerful in the aftermath of the Cold War that it could adopt a profoundly liberal foreign policy.” 32 If America’s relative power ebbs, he predicts, so will its liberal ambitions.

It is certainly true that, after 1989, America’s preeminent position allowed it to expand its ambitions to an unhealthy degree. But this temptation has been fading for years; the existence of surplus power, for example, cannot solely explain US interventions in Afghanistan or Iraq, neither of which would have occurred absent 9/11.33 Any great power enjoying unrivaled predominance will be tempted to widen its ambitions. That US foreign policy did not run even more amok during these years, given its massive surplus power and the lack of any real countervailing force, is perhaps the greater wonder.

In sum, the record of US foreign policy, both during and after the Cold War, does not look like anything close to an unalloyed embrace of primacy and liberal hegemony. It is the story of potent but also constrained ambitions, repeated efforts to meddle in other societies, and many refusals to do so. It is a complex history of partial global engagement marred by a handful of truly excessive tragedies (dominated by a single case—Iraq—which as of 2012 accounted for 67 percent of casualties and 64 percent of costs of all post-1990 US interventions34)—shaped at every turn by kaleidoscopic mixtures of political impulses and constraints, military realities, personality conflicts, ambitions tempered by risk, and many other influences. It is not a record that looks anything like the portrait of hegemony found in much of the restraint literature.

#### Cap increases stability and disincentivizes conflict and expansionism.

Szayna et al. 17, Research department director of the Defense and Political Sciences Department and a senior political scientist at the RAND Corporation. He has over 30 years of experience in national security policy and defense analysis. From 1997 to 2011 he served as associate director of the Strategy, Doctrine, and Resources Program in RAND's Army Research Division. His research has focused on aspects of strategic planning for the U.S. armed forces, post-conflict stability and reconstruction operations, and coalition interoperability. He gave testimony for the U.S. House of Representatives and has been a keynote speaker at a number of defense conferences. Szayna received a B.A. in history and philosophy from Villanova University and an M.A. in international relations from Claremont Graduate School. Also Angela O’Mahony, Jennifer Kavanagh, Stephen Watts, Bryan Frederick, Tova C. Norlen, Phoenix Voorhies. (“Conflict Trends and Conflict Drivers: An Empirical Assessment of Historical Conflict Patterns and Future Conflict Projections”. 2017. https://www.rand.org/pubs/research\_reports/RR1063.html)

There are a number of factors that could lead to discontinuous changes in this metric. For example, a global economic downturn could lead to sharp reductions in development aid that could threaten any improvements in governance that had been made with the benefit of that assistance. Alternatively, a major jump in global energy costs could induce widespread fiscal crises similar to those of the 1970s and 1980s, ultimately leading to reduced state capacity. The branch scenario in red projects essentially no improvements in state capacity over the period in question, so larger changes would entail the rapid erosion of the capacity of states that are already relatively capable. Such changes are certainly possible, but they would constitute an example of nonlinear disruptive change. On balance, our projection is that state capacity is likely to continue to improve, which will tend to exert a downward pressure on the likelihood of intrastate conflict. Prevalence of Consolidated Democracies Consolidated democracies are less likely to fight one another and to be involved in internal conflict. While this correlation is clear, the mechanism by which democracies reduce conflict is more contested. The literature on interstate conflict has focused on the greater transparency and consistency of democratic regimes that allow them to credibly commit to peaceful solutions to disputes and the possibility that domestic norms and greater political accountability may make democratic states less likely to pursue violent conflicts.8 There are fewer arguments that the greater ability of consolidated democracies to resolve grievances within the political system leads to less intrastate conflict.9 We note, however, that partial democracies or the process of democratization itself may not be particularly peaceful and may even be associated with an increase in conflict.10 Given the importance of consolidated democracy in the literature on conflict, there is already a great deal of work in the academic literature on measurement of democracy. Several aggregate measures of democracy have been developed that include the competitiveness of elections; the state’s respect for civil, political, and minority rights; and freedoms of the press and religion. The most widely used measure of consolidated democracy, and the one we employ, comes from the Polity project. By coding a wide range of regime characteristics, such as political 8 Arend Lijphart, Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries, New Haven, Conn., and London: Yale University Press, 1984; Peter Liberman, Does Conquest Pay? The Exploitation of Occupied Industrial Societies, Princeton, N.J.: Princeton University Press, 1996; Charles Lipson, Reliable Partners: How Democracies Have Made a Separate Peace, Princeton, N.J.: Princeton University Press, 2003. 9 Håvard Hegre, Tanja Ellingsen, Scott Gates, and Nils Petter Gleditsch, “Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992,” American Political Science Review, Vol. 95, No. 1, March 2001, pp. 33–48; Christian Davenport, State Repression and the Domestic Democratic Peace, New York, N.Y.: Cambridge University Press, 2007. 10 Hegre et al., 2001; Lars-Erik Cederman, Kristian Skrede Gleditsch, and Simon Hug, “Elections and Ethnic Civil War,” Comparative Political Studies, Vol. 46, No. 3, 2012, pp. 387–417. 49 competition and constraints on the executive, an aggregate “Polity score” is produced, ranging from –10 to 10. Values of 6 or higher are typically used to identify the presence of a democracy, with a more conservative measurement of 8 or higher often used to identify consolidated democracies. We use this metric to calculate the percentage of all states that are consolidated democracies, with the historical values denoted by the black line in Figure 3.2. Figure 3.2. Prevalence of Consolidated Democracies SOURCE: Historical data: Monty G. Marshall and Keith Jaggers, Polity IV Data Set [Computer file; version p4v2012], College Park, Md.: Center for International Development and Conflict Management, University of Maryland, 2002; projections calculated by authors. We projected the baseline scenario by fitting a trend line to the historical data and calculating the future values.11 This projection is represented in the figure by the gray line. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown in the figure by the blue and red lines, respectively. Discontinuous growth in the prevalence of democracies could result from various tippingpoint effects. If a high percentage of the world’s population were governed through democracy, other forms of government may come to be seen as illegitimate, and greater international pressure may be brought to bear to remove them. Within the time frame of our study, a dramatic reversal in the prevalence of consolidated democracies appears to be less likely. The reversion of 11 The trend line was fit using a generalized linear model linked to a binomial logit function. The resulting projections are therefore bounded between 0 and 1 (in this case, 0 and 100 percent). The model used in Figure 3.2 has a Pearson statistic (1/df) of .0037, suggesting a high degree of fit with the data. 50 consolidated democracies to autocracies historically has been extremely rare and is unlikely in the absence of extreme economic decline, the conquest of democracies by more powerful autocracies, or both. Either of these potential paths is likely to lead directly to increases in future conflict levels as well. Degree of Ethnic and Sectarian Polarization The academic literature generally agrees that a high level of ethnic and sectarian polarization is not sufficient by itself to cause conflict either within or between states. However, there is also agreement that in the intrastate context, where group mobilization occurs along ethnic lines, identity can become a significant contributing factor for violence, especially when strengthened by socioeconomic and sociopolitical grievances. Consequently, we identified the degree of ethnic and sectarian polarization as one of the primary factors likely to affect the level of intrastate conflict in the future. Evidence also shows that while ethnicity may not lead to conflict by itself, it may work to prolong conflicts and increase the intensity of violence in those conflicts that are already occurring.12 Such effects will most likely be strengthened if ethnic groups are deliberately disadvantaged by the state or if they are territorially based and have secessionist or separatist demands.13 Scholars tend to agree that ethnic and sectarian polarization, while a strong predictor for increased levels of intrastate conflict, is not a strong driver for conflicts between states. However, if regional and international actors become involved in intrastate conflicts, or if conflicts spread across borders, such polarization could also affect levels of interstate conflict. Such a scenario is especially likely where ethnic kin-groups in neighboring states become involved with secessionist movements.14 Quantifying ethnic and sectarian polarization is inherently difficult. While various measures have been tried, such as linguistic differences (e.g., ethno-linguistic fractionalization) or religious preferences, they are often criticized for not capturing the cleavage that gives rise to political mobilization. For example, different ethnic groups may share the same religion, and one ethnic group may speak multiple languages. It can also be difficult to determine when certain identities in a society are increasing in salience, and when they are becoming less relevant. One prominent 12 Rajat Ganguly and Raymond Taras, Understanding Ethnic Conflict: The International Dimension, Longman Publishers, 2002; Fearon and Laitin, 2003; and Daniel Bar-Tal, “Sociopsychological Foundations of Intractable Conflicts,” American Behavioral Scientist, Vol. 50, No. 11, 2007. 13 Gurr, 1970; Stephen M. Saideman, and William R. Ayres, “Determining the Causes of Irredentism: Logit Analyses of Minorities at Risk Data from the 1980s and 1990s,” Journal of Politics, Vol. 62, No. 4, November 2000, pp. 1126–1144; Monica Duffy Toft, The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory, Princeton, N.J.: Princeton University Press, 2003. 14 John A. Vasquez, and Brendan Valeriano, “Territory as a Source of Conflict and a Road to Peace,” in Jacob Bercovitch, Viktor Kremenyuk, and I. William Zartman, eds., The Sage Handbook of Conflict Resolution, Los Angeles, Calif.: SAGE, 2009, pp. 193–209. 51 attempt to quantify relevant ethnic identities is the Minorities at Risk data set at the University of Maryland, which identifies minority groups by their “at risk” status—that is, by the extent to which they are disadvantaged in their relationships with other groups in the state in which they reside. However, the Minorities at Risk data identify such “at risk” groups somewhat subjectively, and the project does not claim to be comprehensive. An alternative, objective measure is to look for the degree of formal discrimination against ethnic, religious, or linguistic groups. The creation or removal of official laws providing for formal discrimination can help to identify states where identity-based grievances may become more or less salient. For capturing the degree of ethnic and sectarian polarization, therefore, we looked at the percentage of states with formal discrimination against minorities, where such minority groups make up at least 5 percent of the state’s population. We used the Ethnic Power Relations data set (EPR), which tracks the extent of access to state power for all politically relevant ethnic groups in every country of the world from 1946 to 2013. It includes annual data on more than 733 groups and codes the degree to which their representatives held executive-level state power—from total control of the government to being formally barred from holding political office. While the disadvantage of such a proxy may be that it potentially fails to capture some of the unofficial social discrimination that can lead to group mobilization, the advantage is that it allows for a more objective measure of sectarian tension. The overall levels of ethnic or sectarian polarization in the figure below may therefore be understated, but we can have more confidence in the general trend line than we could with more subjective data sources. We projected the baseline scenario by fitting an exponential trend line to the available historical data and calculating the future values.15 The projection is shown by a gray line in Figure 3.3. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown by a red and blue line, respectively. 15 The exponential trend line fit to the data has the equation: y = 0.3098e-0.012x. The trend line has a high degree of fit with the data, with an R² of 0.85. 52 Figure 3.3. Percentage of States with Discriminated Minorities SOURCE: Historical data: Andreas Wimmer, Lars-Erik Cederman, and Brian Min, “Ethnic Politics and Armed Conflict: A Configurational Analysis of a New Global Data set,” American Sociological Review, Vol. 74, No. 2, 2009, pp. 316–337; projections calculated by authors. Discontinuous change in this variable may occur as a result of several factors. Historically, ethnic and sectarian factors often have increased in relevance after the breakup of larger states and empires, including the breakup of the Soviet Union in the early 1990s, or the end of colonialism in the 1960s. The breakup of other large, multiethnic states in the future could result in a similar outcome. Extremely high levels of resource stress because of population pressures also could prompt increased ethnically based conflict within states. Ethnic and sectarian polarization and grievances are latent in many societies, and may become politically important in order to mobilize groups to violence under conditions of severe resource or economic privation. Rate of Economic Growth Economic growth affects the prevalence of conflict in several ways. While territorial expansion traditionally has been a major cause of interstate war, states with higher levels of economic development may be less motivated to pursue such expansion because of the lower relative value of land inputs in an industrialized economy. Moreover, their reliance on international capital markets may increase the potential costs of disruptions from serious 53 international crises.16 At the intrastate level, economic growth (if broadly shared) reduces grievances, bolsters the capacity of the state to handle security challenges, and increases the population’s opportunities for licit employment, thus raising the opportunity costs of participating in rebellions or insurgencies.17 Growth benefits that accrue along ethnic or sectarian lines, however, might increase the potential for intrastate conflict, as discussed in the previous section, and sharp declines in the rate of economic growth could be associated with an increased risk of internal conflict as well.18 Therefore, there are at least two different concepts that any operationalization of this factor should attempt to capture: the overall level of economic development and changes in the rate of economic growth. Over the short term, wealthy countries tend to remain wealthy and poor countries tend to remain poor, and their degree of wealth may have a strong effect on their overall likelihood of being involved in conflict. In addition, sharp declines in the rate of growth for a range of states may increase their likelihood of intrastate conflict in particular.

#### Disrupting the economy won’t end capitalism BUT will unravel interdependence. Great-power war.

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The rise of nationalism/populism is both cause and effect of this economic outlook. Lower growth will make every aspect of the liberal order more difficult to resuscitate post-Trump. Domestic politics will become more polarized and dysfunctional, as competition for diminishing resources intensifies. International collaboration, ad hoc or through institutions, will become politically toxic. Protectionism, in its multiple forms, will make economic recovery from “secular stagnation” a heavy lift, and the liberal hegemonic leadership and strong institutions that limited the damage of previous downturns, will be unavailable. A clear demonstration of this negative feedback loop is the economic damage being inflicted on the world by Trump’s trade war with China, which— despite the so-called phase one agreement—has predictably escalated from negotiating tactic to imbedded reality, with no end in sight. In a world already suffering from inadequate investment, the uncertainties generated by this confrontation will further curb the investments essential for future growth. Another demonstration of the intersection of structural forces is how populist-motivated controls on immigration (always a weakness in the hyper-globalization narrative) deprives developed countries of Summers’ recommended policy response to secular stagnation, which in a more open world would be a win-win for rich and poor countries alike, increasing wage rates and remittance revenues for the developing countries, replenishing the labor supply for rich countries experiencing low birth rates.

Illiberal Globalization

Economic weakness and rising nationalism (along with multipolarity) will not end globalization, but will profoundly alter its character and greatly reduce its economic and political benefits. Liberal global institutions, under American hegemony, have served multiple purposes, enabling states to improve the quality of international relations and more fully satisfy the needs of their citizens, and provide companies with the legal and institutional stability necessary to manage the inherent risks of global investment. But under present and future conditions these institutions will become the battlegrounds—and the victims—of geopolitical competition. The Trump Administration’s frontal attack on multilateralism is but the final nail in the coffin of the Bretton Woods system in trade and finance, which has been in slow but accelerating decline since the end of the Cold War. Future American leadership may embrace renewed collaboration in global trade and finance, macroeconomic management, environmental sustainability and the like, but repairing the damage requires the heroic assumption that America’s own identity has not been fundamentally altered by the Trump era (four years or eight matters here), and by the internal and global forces that enabled his rise. The fact will remain that a sizeable portion of the American electorate, and a monolithically pro-Trump Republican Party, is committed to an illiberal future. And even if the effects are transitory, the causes of weakening global collaboration are structural, not subject to the efforts of some hypothetical future US liberal leadership. It is clear that the US has lost respect among its rivals, and trust among its allies. While its economic and military capacity is still greatly superior to all others, its political dysfunction has diminished its ability to convert this wealth into effective power.13 It will furthermore operate in a future system of diffusing material power, diverging economic and political governance approaches, and rising nationalism. Trump has promoted these forces, but did not invent them, and future US Administrations will struggle to cope with them.

What will illiberal globalization look like? Consider recent events. The instruments of globalization have been weaponized by strong states in pursuit of their geopolitical objectives. This has turned the liberal argument on behalf of globalization on its head. Instead of interdependence as an unstoppable force pushing states toward collaboration and convergence around market-friendly domestic policies, states are exploiting interdependence to inflict harm on their adversaries, and even on their allies. The increasing interaction across national boundaries that globalization entails, now produces not harmonization and cooperation, but friction and escalating trade and investment disputes.14 The Trump Administration is in the lead here, but it is not alone. Trade and investment friction with China is the most obvious and damaging example, precipitated by China’s long failure to conform to the World Trade Organization (WTO) principles, now escalated by President Trump into a trade and currency war disturbingly reminiscent of the 1930s that Bretton Woods was designed to prevent. Financial sanctions against Iran, in violation of US obligations in the Joint Comprehensive Plan Of Action (JCPOA), is another example of the rule of law succumbing to geopolitical competition. Though more mercantilist in intent than geopolitical, US tariffs on steel and aluminum, and their threatened use in automotives, aimed at the EU, Canada, and Japan,15 are equally destructive of the liberal system and of future economic growth, imposed as they are by the author of that system, and will spread to others. And indeed, Japan has used export controls in its escalating conflict with South Korea16 (as did China in imposing controls on rare earth,17 and as the US has done as part of its trade war with China). Inward foreign direct investment restrictions are spreading. The vitality of the WTO is being sapped by its inability to complete the Doha Round, by the proliferation of bilateral and regional agreements, and now by the Trump Administration’s hold on appointments to WTO judicial panels. It should not surprise anyone if, during a second term, Trump formally withdrew the US from the WTO. At a minimum it will become a “dead letter regime.”18

As such measures gain traction, it will become clear to states—and to companies—that a global trading system more responsive to raw power than to law entails escalating risk and diminishing benefits. This will be the end of economic globalization, and its many benefits, as we know it. It represents nothing less than the subordination of economic globalization, a system which many thought obeyed its own logic, to an international politics of zero-sum power competition among multiple actors with divergent interests and values. The costs will be significant: Bloomberg Economics estimates that the cost in lost US GDP in 2019- dollar terms from the trade war with China has reached $134 billion to date and will rise to a total of $316 billion by the end of 2020.19

Economically, the just-in-time, maximally efficient world of global supply chains, driving down costs, incentivizing innovation, spreading investment, integrating new countries and populations into the global system, is being Balkanized. Bilateral and regional deals are proliferating, while global, nondiscriminatory trade agreements are at an end. Economies of scale will shrink, incentivizing less investment, increasing costs and prices, compromising growth, marginalizing countries whose growth and poverty reduction depended on participation in global supply chains. A world already suffering from excess savings (in the corporate sector, among mostly Asian countries) will respond to heightened risk and uncertainty with further retrenchment. The problem is perfectly captured by Tim Boyle, CEO of Columbia Sportswear, whose supply chain runs through China, reacting to yet another ratcheting up of US tariffs on Chinese imports, most recently on consumer goods:

We move stuff around to take advantage of inexpensive labor. That’s why we’re in Bangladesh. That’s why we’re looking at Africa. We’re putting investment capital to work, to get a return for our shareholders. So, when we make a wager on investment, this is not Vegas. We have to have a reasonable expectation we can get a return. That’s predicated on the rule of law: where can we expect the laws to be enforced, and for the foreseeable future, the rules will be in place? That’s what America used to be.20

The international political effects will be equally damaging. The four structural forces act on each other to produce the more dangerous, less prosperous world projected here. Illiberal globalization represents geopolitical conflict by (at first) physically non-kinetic means. It arises from intensifying competition among powerful states with divergent interests and identities, but in its effects drives down growth and fuels increased nationalism/populism, which further contributes to conflict. Twenty-first-century protectionism represents bottom-up forces arising from economic disruption. But it is also a top-down phenomenon, representing a strategic effort by political leadership to reduce the constraints of interdependence on freedom of geopolitical action, in effect a precursor and enabler of war. This is the disturbing hypothesis of Daniel Drezner, argued in an important May 2019 piece in Reason, titled “Will Today’s Global Trade Wars Lead to World War Three,”21 which examines the pre-World War I period of heightened trade conflict, its contribution to the disaster that followed, and its parallels to the present:

Before the First World War started, powers great and small took a variety of steps to thwart the globalization of the 19th century. Each of these steps made it easier for the key combatants to conceive of a general war.

We are beginning to see a similar approach to the globalization of the 21st century. One by one, the economic constraints on military aggression are eroding. And too many have forgotten—or never knew—how this played out a century ago.

…In many ways, 19th century globalization was a victim of its own success. Reduced tariffs and transport costs flooded Europe with inexpensive grains from Russia and the United States. The incomes of landowners in these countries suffered a serious hit, and the Long Depression that ran from 1873 until 1896 generated pressure on European governments to protect against cheap imports.

…The primary lesson to draw from the years before 1914 is not that economic interdependence was a weak constraint on military conflict. It is that, even in a globalized economy, governments can take protectionist actions to reduce their interdependence in anticipation of future wars.

In retrospect, the 30 years of tariff hikes, trade wars, and currency conflicts that preceded 1914 were harbingers of the devastation to come. European governments did not necessarily want to ignite a war among the great powers. By reducing their interdependence, however, they made that option conceivable.

…the backlash to globalization that preceded the Great War seems to be reprised in the current moment. Indeed, there are ways in which the current moment is scarier than the pre-1914 era. Back then, the world’s hegemon, the United Kingdom, acted as a brake on economic closure. In 2019, the United States is the protectionist with its foot on the accelerator. The constraints of Sino-American interdependence—what economist Larry Summers once called “the financial balance of terror”—no longer look so binding. And there are far too many hot spots—the Korean peninsula, the South China Sea, Taiwan—where the kindling seems awfully dry.

### 3

#### Capitalism is good:

#### 1---War. interdependence and transition conflict. Capital is a break on escalation.

Drezner 16, PhD, professor of international politics @ Tufts, nonresident senior fellow @ Brookings (Daniel, May 2016, “Five Known Unknowns about the Next Generation Global Political Economy”, *Brookings*, pg. 15-16, <https://www.brookings.edu/wp-content/uploads/2016/07/IOS-Drezner-web.pdf>)

Multiple scholars have observed a secular decline in interstate violence in recent decades.105 The Kantian triad of more democracies, stronger multilateral institutions, and greater levels of cross-border trade is well known. In recent years, international relations theorists have stressed that commercial interdependence is a bigger driver of this phenomenon than previously thought.106 The liberal logic is straightforward. The benefits of cross-border exchange and economic interdependence act as a powerful brake on the utility of violence in international politics. The global supply chain and “just in time” delivery systems have further imbricated national economies into the international system. This creates incentives for governments to preserve an open economy even during times of crisis. The more that a country’s economy was enmeshed in the global supply chain, for example, the less likely it was to raise tariffs after the 2008 financial crisis.107 Similarly, global financiers are strongly interested in minimizing political risk; historically, the financial sector has staunchly opposed initiating the use of force in world politics.108 Even militarily powerful actors must be wary of alienating global capital.

Globalization therefore creates powerful pressures on governments not to close off their economies through protectionism or military aggression. Interdependence can also tamp down conflicts that would otherwise be likely to break out during a great power transition. Of the 15 times a rising power has emerged to challenge a ruling power between 1500 and 2000, war broke out 11 times.109 Despite these odds, China’s recent rise to great power status has elevated tensions without leading to anything approaching war. It could be argued that the Sino-American economic relationship is so deep that it has tamped down the great power conflict that would otherwise have been in full bloom over the past two decades. Instead, both China and the United States have taken pains to talk about the need for a new kind of great power relationship. Interdependence can help to reduce the likelihood of an extreme event—such as a great power war—from taking place.

#### 2---Warming---clean energy is rapidly superseding fossil fuels which is key to avoid tipping points.

Wallace-Wells 21, \*David Wallace-Wells is deputy editor of New York magazine, where he also writes frequently about climate change and the near future of science and technology; (January 18th, 2021, “After Alarmism”, <https://nymag.com/intelligencer/article/climate-change-after-pandemic.html>)

The change is much bigger than the turnover of American leadership. By the time the Biden presidency finds its footing in a vaccinated world, the bounds of climate possibility will have been remade. Just a half-decade ago, it was widely believed that a “business as usual” emissions path would bring the planet four or five degrees of warming — enough to make large parts of Earth effectively uninhabitable. Now, thanks to the rapid death of coal, the revolution in the price of renewable energy, and a global climate politics forged by a generational awakening, the [expectation](https://climateactiontracker.org/global/temperatures/) is for about three degrees. Recent pledges [could bring us closer to two](https://climateactiontracker.org/publications/global-update-paris-agreement-turning-point/). All of these projections sketch a hazardous and unequal future, and all are clouded with uncertainties — about the climate system, about technology, about the dexterity and intensity of human response, about how inequitably the most punishing impacts will be distributed. Yet if each half-degree of warming marks an entirely different level of suffering, we appear to have shaved a few of them off our likeliest end stage in not much time at all.

The next half-degrees will be harder to shave off, and the most crucial increment — getting from two degrees to 1.5 — perhaps impossible, dashing the dream of avoiding what was long described as “catastrophic” change. But for a climate alarmist like me, seeing clearly the state of the planet’s future now requires a conspicuous kind of double vision, in which a guarded optimism seems perhaps as reasonable as panic. Given how long we’ve waited to move, what counts now as a best-case outcome remains grim. It also appears, miraculously, within reach.

In December, a month after Biden was elected promising to return the U.S. to the Paris agreement, the U.N. celebrated five years since the signing of those accords. They were five of the six hottest on record. (The sixth was 2015, the year the agreement was signed.) They were also the years with the highest levels of carbon output in the history of humanity — with emissions equivalent to what was produced by all human and industrial activity from the speciation of Homo sapiens to the start of World War II.

They have also been the five years in which the nations of the world — and cities and regions, individuals and institutions, corporations and central banks — have made the most ambitious pledges of future climate action. Most of them were made in the past 12 months, in the face of the pandemic. Or, perhaps, to some degree, because of it — because the pandemic demanded a full-body jolt to the global political economy, provoking much more aggressive government spending, a much more accommodating perspective on debt, and a much greater openness to large-scale actions and investments of the kind that might plausibly reshape the world. And because decarbonization has come to seem, even to those economists and policy-makers blinded for decades to the moral and humanitarian cases for reform, a rational investment. “When I think about climate change,” Biden is fond of saying, “the word I think of is jobs.”

There are two ways of looking at these seemingly contradictory sets of facts. The first is that the distance between what is being done and what needs to be done is only growing. This is the finding of, among others, the U.N.’s comprehensive [“Emissions Gap” report](https://www.unenvironment.org/emissions-gap-report-2020), issued in December, which found that staying below two degrees of warming would require a tripling of stated ambitions. To bring the planet in reach of the 1.5-degree target — favored by activists, most scientists, and really anyone reading their work with open eyes — would require a quintupling. It is also the perspective of Greta Thunberg, who has spent the pandemic year castigating global leaders for paying mere lip service to far-off decarbonization targets and who called the E.U.’s new net-zero emissions law “surrender.”

The second is that all of the relevant curves are bending — too slowly but nevertheless in the right direction. The International Energy Agency, a notoriously conservative forecaster, recently [called](https://www.carbonbrief.org/solar-is-now-cheapest-electricity-in-history-confirms-iea#:~:text=Source%3A%20IEA%20World%20Energy%20Outlook%202020.&text=Together%2C%20low%2Dcarbon%20sources%20would,up%20from%2019%25%20in%202019.) solar power “the cheapest electricity in history” and projected that India will build 86 percent less new coal power capacity than it thought just one year ago. Today, business as usual no longer means a fivefold increase of coal use this century, as was once expected. It means pretty rapid decarbonization, at least by the standards of history, in which hardly any has ever taken place before.

Both of these perspectives are true. The gap is real, and the world risks tumbling into it, subjecting much of the global South to unconscionable punishments all the way down. But in the months since the pandemic wiped climate strikers off the streets, their concerns have seeped into not just public-opinion surveys but parliaments and presidencies, trade deals and the advertising business, finance and insurance — in short, all the citadels presiding over the ancien régime of fossil capital.

This is not exactly a climate revolution; the strikers and their allies didn’t win in the way they wanted to, at least not yet. But they did win something. Environmental anxieties haven’t toppled neoliberalism. Instead, to an unprecedented degree, they infiltrated it. (Or perhaps they were appropriated by it. It’s an open question.) Climate change isn’t an issue just for die-hards anymore — it’s for normies, sellouts, and anyone with their finger in the wind. It will take time, of course, for voters to see empty rhetoric for what it is, and for consumers to learn to distinguish, say, between the claims of guiltless airline tickets, or between carbon-free foods in the supermarket aisle. Harder still will be sorting through the differences between real corporate commitments like Microsoft’s and more evasive ones, like BP’s. Already, there is considerable consternation among climate activists that the public doesn’t understand the tricky math of “net-zero” on which so many of these commitments have been made—it is not a promise of ending emissions, but of offsetting some amount of them, in the future, with “negative emissions,” sometimes called “carbon dioxide removal,” though no approach of that kind is ready to go at anything like the necessary scale. And while some amount of skepticism about those commitments is surely warranted, it is also the case that, according to [a recent Bloomberg review](https://www.bloomberg.com/graphics/2020-company-emissions-pledges/), of 187 corporate climate pledges made for 2020 in 2015, 138 will be met. (Many of those promises were quite modest, but it is a much better performance than has been managed by the 189 parties to the Paris agreement, of which only two — Morocco and Gambia — are today [judged](https://climateactiontracker.org/countries/) fully “compatible” with the 1.5-degree goal, and only six more with the 2-degree target).

In the political sphere, the uneasy alliance between activists and those in power will be tested, producing new conflicts, or new equilibria, or both. Consider, though, that Varshini Prakash, whose [Sunrise Movement](https://www.sunrisemovement.org/) gave Biden’s primary candidacy an F, later helped write his climate plan along with Alexandria Ocasio-Cortez. Climate expertise has been distributed throughout the incoming administration, as was promised during a campaign that closed, remarkably, with a climate-focused advertising blitz. During the transition, Biden’s pick for director of the National Economic Council, Brian Deese, was targeted by the environmental left for his time with BlackRock, but even this purported stooge had been married by Bill McKibben, one of the godfathers of modern climate activism.

Elsewhere in the world, where 85 percent of global emissions are produced, the great infiltration of climate concerns represents what the British environmental [writer](https://www.businessgreen.com/blog-post/4025199/2020-crisis-crossroads-alternative-histories) James Murray has called “an alternative history to 2020” and what the scientist turned journalist Akshat Rathi [has declared](https://www.bloomberg.com/news/articles/2021-01-05/climate-action-is-embedding-into-how-the-world-works) “a strong sign that climate action is starting to be ‘institutionalized’ — that is, getting deeply embedded into how the world works.” This is not about coronavirus lockdowns producing emissions drops or “nature healing.” It is instead about long-standing trajectories passing obvious tipping points in coal use and political salience; promises and posturing by powerful if compromised institutions; and policy progress almost smuggled into place, all over the world, under cover of pandemic night. In the U.S., in the second coronavirus stimulus, [$35 billion in clean-energy spending](https://nymag.com/intelligencer/2020/12/what-is-in-covid-stimulus-omnibus-climate-pell-grants-medical-billing.html) passed in the Senate 92-6 — an effective down payment, energy researcher Varun Sivaram has estimated, on the innovation spending needed for a full electrification of the country. Did you even notice?

Biden’s climate plan now faces the challenge of a filibuster, a skeptical Supreme Court, and the mood of Senator Joe Manchin of West Virginia, which means American climate action over the next four years is probably more likely to be delivered piecemeal — through appropriations and stimulus, executive action, and regulation — than through a landmark Green New Deal–style piece of legislation. That does limit what can be achieved, but it also means avoiding a protracted battle over climate as a referendum on the identity of the nation. And at least nominally, having been pressured by activists to do so, Biden is promising to multiply the green spending in that recent stimulus by a factor of 60.

The numbers are numbingly large — reminders that in the midst of pandemic turmoil, the rules of state spending have been dramatically revised and perhaps even suspended. Is this global free-spending binge the beginning of a new era or merely a crisis interregnum to be followed by a new new austerity? “We don’t know what the recovery packages of COVID are going to be,” Christiana Figueres, one of the central architects of the Paris accords, told me this summer. “And honestly, the depth of decarbonization is going to largely depend on the characteristics of those recovery packages more than on anything else, because of their scale. We’re already at $12 trillion; we could go up to $20 trillion over the next 18 months. We have never seen — the world has never seen — $20 trillion go into the economy over such a short period of time. That is going to determine the logic, the structures, and certainly the carbon intensity of the global economy at least for a decade, if not more.”

For those dreaming of a climate recovery, the first round of spending was not so encouraging. The E.U. was the gold standard, promising that 30 percent of its stimulus would be earmarked for climate. The U.S. and China each pledged only a fraction of that (and in each case, there was fossil stimulus, too). But in October, a team of researchers including Joeri Rogelj of the Imperial College of London [calculated](https://www.reuters.com/article/climate-change-stimulus/tenth-of-pandemic-stimulus-spend-could-help-world-reach-climate-goals-study-idUSKBN271098) that just one-tenth of the COVID-19 stimulus spending already committed around the world, directed toward decarbonization during each of the next five years, would be sufficient to deliver the goals of the Paris agreement and stop global warming well below two degrees. That analysis may be a touch optimistic, but the level of spending seems, now, doable.

When Donald Trump was elected, trashing Paris, climate hawks were left hoping that the world would hang on for the length of his administration — insisting that, in the long term, the crisis couldn’t be solved without America at the helm. But the past four years of missing leadership have produced astonishing gains.

The price of solar energy has fallen ninefold over the past decade, as has the price of lithium batteries, critical to the growth of electric cars. The costs of utility-scale batteries, which could solve the “intermittency” (i.e., cloudy day) problem of renewables and help power whole cities in relatively short order, have fallen 70 percent since just 2015. Wind power is 40 percent cheaper than it was a decade ago, with offshore wind experiencing an even steeper decline. Overall, renewable energy is less expensive than dirty energy almost everywhere on the planet, and in many places it is simply cheaper to build new renewable capacity than to continue running the old fossil-fuel infrastructure. Oil demand and carbon emissions may both have peaked this year. Eighty percent of coal plants planned in Asia’s developing countries have been shelved.

This summer, I heard the Australian scientist and entrepreneur Saul Griffith talk about what it would take to get the U.S. within range of a 1.5 degree world. He said it would mean that beginning in 2021, this year, every single person buying a new car would have to be buying an electric one. That seems unrealistic, I thought, making a note of it as a useful benchmark illustrating just how far we have to go.

Then, in the fall, the U.K. pledged to ban nonelectrics by 2030—a once-unthinkable law coming both too slow and much more quickly than seemed possible not very long ago. Similar plans are now in place in 16 other countries, plus Massachusetts and California. Canada recently raised its tax on carbon sixfold. Italy cut its power-sector emissions 65 percent between 2012 and 2019, and Denmark is now aiming to reduce its overall emissions 70 percent by 2030. “We set ourselves challenges that on paper looked almost impossible,” the country’s minister for the environment, Dan Jørgensen, told me recently. “And I think experts in many countries said, when looking at Denmark, ‘This is going to be too expensive, this is going to lower their living standards, this is going to hurt their ability to compete.’ But actually I’m proud to say that the opposite has happened. Now, of course, we have set even higher standards.”

In the midst of the pandemic, new net-zero pledges, far more ambitious than those offered at Paris, were independently made by Japan, South Korea, the E.U., and, most significant, China, the world’s biggest emitter, which promised to reach an emissions peak by 2030 and get all the way to zero by 2060. China’s promise is so ambitious it has inspired one wave of debate among experts about whether it is even feasible — given that it would require, for instance, roughly twice as much renewable power to be installed every year for the next decade as Germany has operating nationwide today — and another debate about whether it has revived the possibility of that 1.5-degree target, with economic historian Adam Tooze writing, just after Xi Jinping’s surprise announcement in September, that it single-handedly “redefined the future prospects for humanity.” Together, the new net-zero pledges may have subtracted a full half-degree from ultimate warming. Add Biden’s campaign pledge of net zero by 2050, and you’ve got about two-thirds of global emissions at least nominally committed to firm, aggressive timelines to zero.

These are all just paper promises, of course, and the history of climate action is littered with the receipts of similar ones uncashed. Plot the growth of carbon concentration in the atmosphere against the sequence of climate-action conferences and a distressing pattern emerges: the World Meteorological Conference of 1979, the U.N. framework of 1992, the Kyoto protocol of 1997, the Copenhagen accord of 2009, and the 2015 Paris accords, all tracking an uninterrupted trajectory upward for carbon from a “safe” level under 350 parts per million, past 400, to 414 today, and pointing upward from there. Before the industrial revolution, humans had never known an atmosphere with even 300 parts per million. Inevitably now, within a few years, the concentration will reach levels not seen since 3.3 million years ago, when sea levels were 60 feet higher. For all their momentum, renewables still only make up 10 percent of global electricity production.

But alarmists have to take the good news where they find it. And while mood affiliation is not always the best guide to the state of the world, in 2020, for me, there were three main sources of hope.

The first is the fact that the age of climate denial is over thanks to extreme weather and the march of science and the historic labor of activists — climate strikers, Sunrise, Extinction Rebellion — whose success in raising alarm may have been so sudden that they brought an end to the age of climate Jeremiahs as well. Their voices now echo in some unlikely places. Exxon was booted from the S&P 500 within months of Tesla making Elon Musk the world’s richest man. The cultural cachet of oil companies is quickly approaching that of tobacco companies. Jair Bolsonaro of Brazil aside, practically every leader of every country and every major figure in every corporate and industrial sector now feels obligated — because of protest and social pressure, economic realities, and cultural expectation — to at least make a show of support for climate action. It would be nice not to have to count that as progress, but it is. The questions are: How much does it matter? And what will follow? Disinformation and human disregard are not the only instruments of delay, and the age of climate denial is likely to yield first not to an age of straightforward climate deliverance but to one characterized by climate hypocrisy, greenwashing, and gaslighting. But those things, ugly and maddening and even criminal as they are, have always been with us. It is the other thing that is new.

The second source of good news is the arrival on the global stage of climate self-interest. By this I don’t mean the profiteering logic of BlackRock, which opportunistically announced some half-hearted climate commitments last year, but rather the growing consensus in almost every part of the globe, and at almost every level of society and governance, that the world will be made better through decarbonization. A decade ago, many of the more ruthless capitalists to analyze that project deemed it too expensive to undertake. Today, it suddenly appears almost too good a deal to pass up. (A recent McKinsey [report](https://www.mckinsey.com/business-functions/sustainability/our-insights/how-the-european-union-could-achieve-net-zero-emissions-at-net-zero-cost): “Net-Zero Emissions at Net-Zero Cost.”)

The logic may be clearest in considering the effects of air pollution, which kills an estimated 9 million people per year. In India, where more than 8 percent of GDP is lost to pollution, poor air quality is also responsible for 350,000 miscarriages and stillbirths every year. Globally, coal kills one person for every thousand people it provides power to, and even in the U.S., with its enviably clean air, total decarbonization would be entirely paid for, Duke’s Drew Shindell [recently testified](https://www.vox.com/energy-and-environment/2020/8/12/21361498/climate-change-air-pollution-us-india-china-deaths) before Congress, just through the public-health benefits of cutting out fossil fuels. You don’t even have to calculate any of the other returns — more jobs, cheaper energy, new infrastructure. Of course, countries all around the world are incorporating those considerations too, turning the page on a generation of economic analysis that said decarbonization was too costly and its benefits too small to sell to the public as upside.

A decade ago, capitalists deemed decarbonization too expensive. Suddenly, it appears too good a deal to pass up.

What is perhaps most striking about all the new climate pledges is not just that they were made in the absence of American leadership but that they were made outside the boundaries of the Paris framework. They are not the result of geopolitical strong-arming or “Kumbaya” consensus. They are, instead, plans arrived at internally, in some cases secretly. This has been eye-opening for the many skeptics who worried for decades about climate’s collective-action problem — who warned that because the benefits of decarbonization were distributed globally while the costs were concentrated locally, nations would move only if all of their peers did too. But a [recent paper](https://www.mitpressjournals.org/doi/full/10.1162/glep_a_00578) by Matto Mildenberger and Michaël Alkin suggests this shouldn’t be a surprise. In their retrospective analysis, they found that, despite much consternation about designing climate policy to prevent countries from “cheating,” there was basically no evidence of any country ever pulling back from mitigation efforts to take a free ride on the good-faith efforts of others. There was, in other words, no collective-action problem on climate after all. For a generation, the argument for climate action was made on a moral basis. That case has only grown stronger. And now there are other powerful, more mercenary arguments to offer.

The third cause for optimism is that, while the timelines to tolerably disruptive climate outcomes have already evaporated, the timelines to the next set of benchmarks is much more forgiving. This is why Glen Peters, the research director at the Cicero Center for International Climate Research, often jokes that while keeping warming below two degrees is very hard, perhaps even impossible, keeping it below 2.5 degrees now looks like a walk in the park.

This isn’t to say we’re on a glide path to safety. At current emissions levels, the planet will entirely exhaust the carbon budget for 1.5 degrees in just seven years — stay merely level, in other words, and we’ll burn through the possibility of a relatively comfortable endgame within the decade. We could buy ourselves a little more time by starting to move quickly, but not that much more. To decarbonize fast enough to give the planet a decent chance of hitting that 1.5-degree target without any negative emissions would require getting all the way to net-zero emissions by around 2035. Simply running the cars and furnaces and fossil-fuel infrastructure that already exists to its expected retirement date would push the world past 1.5 degrees—without a single new gasoline SUV hitting the road, or a single new oil-heated home being built, or a single new coal plant opened.

A two-degree target, by contrast, yields a much longer timeline, requiring the world to achieve net-zero by 2070 or 2080 — without even the help of negative emissions. We’d have to cut carbon production in half in about three decades, rather than one. That pathway will almost certainly prove harder than it looks. The good news is that we seem to be beginning, at least, to try.

#### Emergence of smart cities depends on IoT applications of 5G interoperability standards---absent FRAND, excessive royalties will undermine sustainable development.

Schwartz 18, \*Matt Schwartz, Privacy Fellowship Coordinator at ACT, App Association; (March 2nd, 2018, “It’s Smart to be FRANDly: How the FRAND Commitment Will Determine the Future of Smart Cities”, https://actonline.org/2018/03/02/its-smart-to-be-frandly-how-the-frand-commitment-will-determine-the-future-of-smart-cities/)

In December, we [outlined](https://actonline.org/2017/12/18/smart-cities-connecting-your-community-through-technology/%5d) the emergence of Smart Cities – cities that harness technological innovations like internet of things (IoT) devices and data analytics to improve essential infrastructure in growing urban centers. The technological foundation of Smart Cities aims to improve public safety, better allocate resources, and meet the needs of citizens more quickly.

A central element to Smart Cities is the comprehensive network of sensors and devices implemented within buildings, roads, traffic signs, and parking meters that allows them to interact with public, and potentially private-owned, infrastructure. These sensors will “speak” to one another, communicating information about energy usage, traffic density, or other elements of city management that have traditionally either been analyzed separately or not tracked at all. The potential of Smart Cities allows data to flow from previously disconnected branches of the city and be processed in real-time, unlocking previously unknown insights.

The powerful interoperability of Smart Cities will rely heavily on standardized technologies developed in organizations like the IEEE, which is responsible for standardizing the wi-fi technology we use every day. Standardized technologies often include standard-essential patents (SEPs), which, like their name suggests, are patents declared essential to an industry standard by a standards-setting organization. In simple terms, one cannot implement the standardized technology without using the patent.

Like regular patents, the users of SEPs must pay royalties or licensing fees to the patent owner before they may use it. For example, if a manufacturing company wants to make an IoT device interoperable with a 5G network, the manufacturer must pay a licensing fee to the owner of the SEP that is essential to the 5G standard. SEPs play a vital role in the new innovations we enjoy and have come to expect, and because of the value of these patents, SEP holders have the ability to demand high license fees from those who wish to implement the standard. To offset this competition issue, many SEP holders voluntarily agree to license their SEPs to any willing licensee under fair, reasonable, and non-discriminatory (FRAND) terms.

While wi-fi and LTE are standards that will be vital to Smart City deployment, countless new standardized technologies are being developed that will be integral to any fully-operational Smart City. With reasonable access to SEPs, assured by the FRAND commitment, innovators can enjoy the legal and business certainty they need to compete. While the meaning of the FRAND commitment continues to be refined – as evidenced by the development of SEP best practices recently launched by the App Association in Europe – its foundations are well-established.

But what happens when SEP holders do not abide by the FRAND licensing commitment, or simply refuse to license at all? Sadly, small and medium-sized companies would be forced to accept untenable licensing terms, but more realistically, they would be priced out of using the standard altogether. As a result, it would impose a barrier to innovation that would result in fewer products offered to consumers or cities eager to implement IoT technologies. For example, many hope the rise of autonomous vehicles will be seamlessly integrated into the Smart City network. But how beneficial would it be if only some autonomous vehicle brands are able to license the technology needed to communicate with traffic lights, simply because of the market power of a chipmaker? The FRAND commitment is an important backstop to that unfortunate possibility.

It is vital for SEP holders to honor FRAND licensing terms, if not for small and medium-sized innovators, then for the sustainability of future Smart Cities. FRAND creates a platform for innovation, providing a floor on which companies can stand, innovate, and compete. If the foundation of the FRAND commitment is reneged, American innovators pay a steep price – not only do they lose a key component of product development and market entry, but they are also left with years of expensive negotiations and litigation if they choose to challenge the licensing practice. What’s more, the confidence developed in the open standards development system is shaken, and Smart Cities have fewer choices in IoT solutions for their future.

To achieve the promise of Smart Cities, a balanced standards ecosystem is essential. We must allow small and medium-sized developers to leverage industry standards for innovation and prevent cost-prohibitive royalty structures and negotiating practices that are detrimental to competition, while also ensuring that SEP owners can protect their intellectual property and be fairly compensated for its use. The FRAND commitment continues to be the best framework to achieve this balance, and adherence to its principles will determine the future and success of Smart Cities.

### 2AC ⁠— Supply Chains Good

#### Supply chains decentralize production and disperse technology---inverts wealth extraction.

Milanović 19 (Branko, Serbian-American economist. He is most known for his work on income distribution and inequality. Since January 2014, he is a visiting presidential professor at the Graduate Center of the City University of New York and an affiliated senior scholar at the Luxembourg Income Study, “Capitalism, Alone: the Future of the System That Rules the World,” 2019, The Belknap Press of Harvard University Press, DOA: 11-12-2020) //Snowball //strikethrough of rhetoric

Global value chains have redefined economic development. It was argued in the past that the participation of ~~developing~~ countries in the international division of labor was inimical to their development in at least three ways and would lead to the “development of underdevelopment,” as André Gunder Frank termed it in an influential article published in 1966.

First, according to the dependencia (or theory of dependency) school of thought, linkages with the Global North involved only a limited number of exporting sectors and failed to develop internal backward or forward linkages to push ~~developing~~ countries onto the path of sustained development.

This view was complemented by a second argument, called “export pessimism,” which predicted that the Global South would indefinitely remain an exporter of raw materials, with deteriorating long-term terms of trade.

Finally, Robert Allen (2011) has recently argued that technological progress always takes place at the capital-labor ratio of the country that is the most developed at the time. For example, Britain, the most advanced economy in 1870, had an interest in introducing new ways of producing output at the capital-labor (K/L) ratio it faced then; similarly, the United States, as the most advanced economy today, has an incentive to innovate for those production techniques that use very high K/L ratios. In general, advanced economies do not have an incentive to innovate at the K/L ratios at which they do not produce. (No one in the United States, for example, would spend money to find a better way to build a car using manual labor rather than robots.) The implication is that poor countries today face the same technologically backward, two-centuries-old production function because no one in the rich world has an incentive to improve the efficiency of production at their K/L ratios. In other words, technologically advanced countries do not have an interest in finding more efficient ways of production at the K/L ratios they do not themselves experience, and poor countries do not possess the know-how to do it. Poor countries are thus caught in a poverty trap: in order to develop they need to upgrade their production, but technologies that exist at their K/L ratios are old-fashioned and inefficient.

All of this Global South pessimism was upended by the rise of global value chains. Today, for a country to develop, it must be included in Western supply chains rather than trying to delink from the rich world. A key reason for this is that foreign investors see global value chains as integral parts of their own production processes: they no longer have to be “begged” to bring in the most advanced or the most appropriate technology. They now have the incentive to introduce technological development at the level of the wage rate and the K/L ratio they face in poor countries, thus doing away with the poverty trap that Allen identified. The importance of this change, both for real life and for what it tells us about the ideological justification of globalization as a way forward for the development of poorer countries, cannot be overestimated.

These matters are very ably analyzed in Richard Baldwin’s book The Great Convergence (2016). Baldwin argues that only those countries that have been able to insert themselves into global supply (or value) chains have succeeded in accelerating their development. These countries are, according to Baldwin, China, South Korea, India, Indonesia, Thailand, and Poland; several others (Bangladesh, Ethiopia, Burma, Vietnam, Romania) could be added to the list. However, to understand why they have benefited so much from globalization, we need to understand the technical ways in which today’s globalization differs from the previous globalization in addition to much better protection of property rights (thanks to international treaties and mechanisms of enforcement). It is these novel and specific features of globalization that have made global value chains of such importance.

Baldwin defines three eras of globalization that are characterized by the reduced cost of transporting, successively, (1) goods, (2) information, and (3) people. The first two eras correspond to the two globalizations I have already mentioned, while the third lies in the future. The argument goes as follows: When the transportation of goods was perilous and expensive, production and consumption had to coincide geographically—communities consumed whatever they produced. In even the most developed premodern societies, such as ancient Rome, the bulk of trade consisted of luxury items and wheat. But Rome was an exception; in most premodern societies, trade was minimal.

Then came the Industrial Revolution, which lowered the transportation cost of goods. This made shipment of goods to faraway destinations possible and created the first globalization, or the “first unbundling,” as Baldwin calls it: goods were produced “here” and consumed “there.” This also gave economics practically all the concepts and the intellectual toolkit that we still use today. The first unbundling produced a new concern with national trade balances and thus introduced mercantilism. It also led to a focus on national production of goods through all their stages and a view of trade as consisting of nation A exporting a good to nation B (but not of company A selling goods to company B, or of company A selling things to its subsidiary, which then sells them to company B). Finally, it gave us a theory of growth that sees nations advancing from the production of food to the production of manufactures and further on to services. Practically all the tools of modem economics are still rooted in the way the first unbundling occurred.12 The main features of the first unbundling were (i) trade of goods, (ii) direct foreign investment (which, absent any other means of securing property rights in distant locations, led to colonialism), and (iii) nation-states

Today, in what Baldwin identifies as the second unbundling (and the second globalization), all three main actors have changed. Now, the control and coordination of production is done “here,” but the actual production of goods is done “there.” Notice the difference: first you unbundle production and consumption, then you unbundle the production itself.13 The unbundling of production was made possible by the ICT revolution, which allowed companies to design and control processes from the center while spreading the production to hundreds of units or to subcontractors dispersed around the world. The reduced cost of transporting information (basically, the ability to coordinate and control regardless of distance) is for the second unbundling what the reduced cost of shipping was for the first. Now, the main players are (i) information and control (instead of goods), (ii) global coercive institutions (instead of colonialism), and (iii) companies (instead of nations).

A couple of other things are distinctive about the second unbundling. First, the importance of institutions has increased. When globalization involved only the export of goods, institutions in the country to which the goods were exported did not matter much; whether institutions “there” were good or bad, exporters were paid about the same.14 This is not the case with the second unbundling. When production is delocalized, the quality of the institutions, infrastructure, and politics in the recipient country matters enormously to the center. If designs are stolen, goods are impounded, or the travel of people between the center and the off shore location is made difficult, the entire production structure of the company collapses. For the center, the quality of institutions in the off shore location becomes almost as important as the quality of institutions locally. This means that institutions in the periphery now either have to hew as closely as possible to the institutions that exist in the center or to be as integrated as possible, which is exactly the opposite of what the dependencia school taught.

Second, technological progress in the off shore locations now has an entirely different hue than in the past. Whereas in the past ~~developing~~ countries had to try hard to induce foreign investors to share their know-how, now a company based in the center (the mother company) has incentives to make sure the best technology is used in the off shore location, which has become an integral part of the center’s production chain. This is an enormous change: rather than poor countries trying to incentivize foreign companies to transfer technology, now the owner of that technology is keen to transfer to the off shore location as much of it as possible.

The tables, in some sense, have turned: it is now the nation where the mother company is located that tries to prevent the company from transferring its best technology to the periphery. Innovation rents, received by the leaders in new technologies, are being dissipated away from the center. This is one of the key reasons why people in the rich world often complain about outsourcing (or off shoring). They criticize it not only because domestic jobs are affected but because innovation rents are shared more often with foreign than with domestic labor. The gains from new technology accrue to the entrepreneurs and capitalists in the center but also to the workers in the less-developed areas to which the production is outsourced. An indication of that process is that off shoring has been particularly strong in high-tech industries. In a study of eight advanced economies (Japan, Denmark, Finland, Germany, Italy, the Netherlands, the United Kingdom, and the United States), Bournakis, Vecchi, and Venturini (2018) found that high-tech off shoring increased from 14 percent of the value added in the late 1990s (the level at which it has been since the beginning of that decade) to about 18 percent by 2006. Off shoring in low-tech industries has remained stable at around 8 percent of the value added. The people who are cut out from the benefits are workers in the rich countries. This change is also one of the main reasons why today’s globalization is accompanied by labor’s loss of bargaining power in rich countries and the stagnation of wages for less-skilled workers (or at least those who can easily be replaced by foreigners). This also explains recent attempts to roll back globalization in the developed world. And most importantly, it is at the origin of a tacit coalition that has been formed, at the global level, between rich people in rich countries and poor people in poor countries.

The second unbundling also fundamentally changes our view that development goes through orderly, predetermined stages. The old-fashioned view, following upon the way England, and later the United States and Japan, developed, was that countries went through an import-substitution stage with significant tariff protection, then developed exports of simple manufactures, and later gradually moved into more sophisticated products with higher value added. This was the idea that underlay most of development policy between the 1950s and the 1980s. South Korea, Brazil, and Turkey were the best examples of countries following such policies. In the 1990s, with the second globalization, things changed. What has become crucial for the success of ~~developing~~ countries is no longer to develop through various predetermined stages using their own economic policies, but to become part of the global supply chains organized by the center (the Global North). And moreover, not merely to go into higher value-added stages by copying what richer countries are doing, but, as China is doing now, to become technological leaders themselves. The second unbundling has made it possible to skip the stages that were earlier thought necessary. As recently as the 1980s, it was unthinkable that countries that were overwhelmingly rural and poor, like India and China, would within two or three generations become technological leaders, or at least come close to the production possibility frontier in some areas. Thanks to their insertion into global supply chains, it became a reality.

The way to interpret Asia’s success in the current era is not by seeing China, India, Indonesia, Thailand, and so on as the latest versions of South Korea. They are the trailblazers of a new road to development which, through integrating one’s economy to the developed world, leapfrogs over several technological and institutional stages. The most successful countries in the second globalization are those that, because of institutional factors, the skill and cost of their labor, and their geographical proximity to the North, are able to become an integral part of the Northern economy. This pattern inverts the old dependencia paradigm, which held that delinking was the way to develop. On the contrary, becoming linked is what allowed Asia to travel the road from absolute poverty to middle-income status in a remarkably short span of time. This technological and institutional linking is at the origin of capitalism’s spread to the rest of the world and its current universal dominance. The second globalization and the dominance of capitalism thus go together.

#### But, the alternative privileges great powers---everyone else can’t be self-sufficient and gets abandoned during the pandemic.

Wolf ‘20

(Martin Wolf is chief economics commentator at the Financial Times, London. “The dangerous war on supply chains” June 23, 2020. https://www.ft.com/content/e27b0c0c-1893-479b-9ea3-27a81c2506c9)**AB**

“One of the things that this crisis has taught us, sir, is that we are dangerously overdependent on a global supply chain for our medicines, like penicillin; our medical supplies, like masks; and our medical equipment, like ventilators.” Thus, did Peter Navarro, an influential adviser of US president Donald Trump, draw lessons from the Covid-19 crisis for American trade policy. The dangerous war on supply chains Protectionism in a crisis only concentrates risk domestically and diminishes economies of scale This view is seductive to protectionists. But it is wrong. The lesson from the crisis is to be better prepared. Self-sufficiency in “essential products” would not be a good way to achieve this. On the contrary, it would be a costly error. Attacks on cross-border supply chains should not be viewed in isolation. The latest forecasts from the World Trade Organization suggest that the collapse in trade now could be far bigger than in response to the 2008 financial crisis. It would be very damaging if policymakers responded to the steep decline in their countries’ exports by curbing imports. Yet that is what forced “reshoring” of supply chains means. It would be yet another assault on liberal trade. (See charts.) Covid-19 brought forth a wave of export restrictions instead. The products covered by these prohibitions and restrictions vary. But most of them focused on medical supplies (face masks and shields, for example) and pharmaceuticals and medical equipment (ventilators, for example). These restrictions are legal. But that does not make them wise. In a collection of essays on Covid-19 and Trade Policy, Richard Baldwin of the Graduate Institute in Geneva and Simon Evenett of St Gallen ask: “Should governments react to the health, economic, and trade crises by turning inward?” The answer is: No. “Turning inward won’t help today’s fight against Covid-19 . . . Trade is not the problem; it is part of the solution.” Remember that the problem was not with trade, but rather with a lack of supply. Export restrictions merely reallocate the shortages, by shifting them on to countries with the least capacity. A natural response to this experience is for every country to try to be self-sufficient in every product that might turn out to be relevant. That is what Mr Navarro suggests the US should do. Yet businesses would then lose economies of scale, as global markets fragmented. Their capacity to invest in innovation would be reduced. Only the largest and most advanced economies could plausibly seek self-sufficiency in such a wide range of technologies. For all others, this would be a dead end. More relevant, self-sufficiency is not at all a guarantee of greater security. In his chapter in the book edited by Profs Baldwin and Evenett, Sébastien Miroudot of the OECD distinguishes helpfully between “resilience” and “robustness”. The former refers to the ability to return to normal operations after a disruption; the latter to the ability to maintain operations during a crisis. In a pandemic, the latter is probably the more relevant. It is necessary to have access to essential supplies in a pandemic, though it is also necessary to be able to restore production quickly if some of it is disrupted. The obvious way to achieve robustness is to diversify suppliers across multiple locations. Producing in one’s own country is not a guarantee of robustness. Any given location might be affected by a pandemic, hurricane, earthquake, flood, strikes, civil unrest or even war. To put every egg in one basket, even the domestic one, is risky. Robustness in supply can thus be achieved through a mixture of a multiplicity of suppliers with holding stocks of essential products. The possibility of importing increases the potential number of suppliers and possibly the access to surplus stocks, too. Protection, however, concentrates risk domestically, reduces the diversity of potential suppliers and diminishes the pressure of competition and economies of scale. So far, global supply chains in health products have turned out to be robust. Mr Miroudot notes the ability of South Korea to supply Covid-19 test kits globally. He argues that its ability to expand supply quickly “requires international networks, skilled supply chain managers, reactivity, and agility. This type of experience simply does not come from local production and activities shielded from competition.” So what would a sensible policy look like? There would be national and global efforts to identify essential products in the event of various emergencies. There would then be monitoring of relevant supply chains and inventories, both domestic and global. To achieve this, one would need respected and well-funded national and global bodies working alongside private industry. This should be viewed as a fundamental security concern. The pandemic has, after all, posed a vastly greater threat to security than the military threats governments have been spending trillions of dollars to contain. In the course of such an effort, countries might seek to identify potential vulnerability to supplies from particular partners. Mutual vulnerability can be a source of stability. But countries might regard some sources as too risky. Yet a shift of supply back home need not be the response. Other possibilities exist. Trade is a vital part of the global response to a pandemic, including the creation and distribution of the vaccine we need. Trade must also remain a large part of the global economy more broadly. The ability to trade freely augments the diversity, and even reliability, of supply. It also creates a big opportunity. Covid-19 may indeed reverse the integration of production of past decades. We will regret it greatly if it does.

#### Globalization is immensely beneficial for improving quality of life in the Global South---it’s also widely supported which proves their epistemic skepticism is from an ivory tower.

Horner et al. 18 (Rory, Global Development Institute, University of Manchester, Manchester, UK, “Globalisation, uneven development and the North–South ‘big switch’,” Cambridge Journal of Regions, Economy and Society 2018, 11, 17–33 doi:10.1093/cjres/rsx026, DOA: 11-12-2020) //Snowball //strikethrough of rhetoric

Citizen surveys further reveal dramatic changes in attitudes to globalisation across and within the global North and South. While such surveys have methodological limitations,1 the results indicate distinctive trends that support the thesis of the ‘big switch’. Among people in the global South, polls have consistently found quite positive attitudes towards globalisation. In 2007, the Times of India claimed that ‘Indians believe globalisation benefits their country’, citing a poll by the Chicago Council on Global Affairs and World Public Opinion that 54% of Indians answered ‘good’ compared to 30% ‘bad’ to the question of whether increasing economic connections ‘with others around the world is mostly good or bad’. More recently, Stokes (2016) reported on Pew Research Surveys from 2016 which found that 60% of Chinese think their country’s involvement in the global economy is good (compared to 23% who think it is bad), while 52% of Indians surveyed thought it was good compared to 25% who said it was a problem. A recent YouGov survey of 20,000 people across 19 countries found a majority believed that globalisation has been a force for good. That survey found the most enthusiasm for globalisation in East and South-East Asia, where over 70% in all countries believed it has been a force for good. The highest approval, 91%, was in Vietnam, a relative latecomer to globalisation (Smith, 2017).

By contrast, public support for globalisation in the global North has plummeted. Bhagwati (2004) cited an Environics International Survey presented at the 2002 World Economic Forum Meetings to argue that disillusionment with globalisation was not universal; ‘anti-globalisation sentiments are more prevalent in the rich countries of the North, while pluralities of policy makers and the public in the poor countries of the South see globalisation instead as a positive force’ (2004, 8). Although Bhagwati suggested this was an ‘ironic reversal’, it proved to be in line with a 2007 BBC World Service poll that found 57% of people in G7 countries thought the pace of globalisation was too rapid, whereas the majority of those in ~~developing~~ countries surveyed thought it was just right or too slow (e.g. IMF, 2008; Pieterse, 2012). A 2007 Pew Global Poll similarly found a decline in the percentage of people in many Northern countries who believed trade had a positive impact. In its analysis of the survey results, Kohut and Wilke (2008, 6–7) commented that ‘it is in economically stagnant Western countries that we see the most trepidation about globalisation’. Almost 10 years later, The Economist (2016) reported on a YouGov survey of 19 countries, which found that fewer than half of people in the USA, UK and France believed that globalisation is a ‘force for good’ in the world. This broad change in attitude toward globalisation is playing out in national electoral politics as well as gatherings such as the World Economic Forum and the meeting of the Asia-Pacific Economic Cooperation.

The ‘big switch’ and the geography of uneven development

The ‘big switch’ seemingly confounds the predictions of the most vocal proponents and critics of globalisation alike. Uneven development is dynamic and relates to differences both within and among countries (Sheppard, 2016). Naïve claims that the world is flat or that economic globalisation is ‘win-win’ have rightly been dismissed (Baldwin, 2016; Christopherson et al., 2008; Turok et al., 2017), yet it is also insufficient to suggest that globalisation simply leads to a reproduction of existing inequalities, overlooking how that unevenness may be changing as a result of new macroeconomic geographies (Peck, 2016). While trade theory could predict that there would be ‘losers’ in the global North from international economic integration, proponents of economic globalisation have asserted that they would be few in number and could be compensated. More recently, it appears that a large group of people feel more forsaken than compensated. Similarly, for those who embraced Marxian political economy, and warned of its negative consequences in the South, the apparent optimism and support for globalisation in the South may have been unexpected. The sceptical internationalists (e.g. Evans, 2008; Kaplinsky, 2001; Stiglitz, 2006) should be acknowledged, however, for forecasting downsides in the global North. As we outline below, many people in the global North have experienced relative stagnation, whereas, albeit from a very low starting point and amidst considerable inequality, many people (but not all) have experienced improved development outcomes in the global South. We then explore what this apparent ‘big switch’ may tell us about contemporary economic globalisation.

The new geography of global uneven development

Significant portions of the population in the USA and other countries in the global North have experienced limited, if any, income gains in an era of globalisation. Milanovic’s (2016) ‘elephant graph’ (Figure 1) has quickly become a popular way to demonstrate the relative stagnation experienced in North America and Europe in recent decades. Exploring changes in real incomes between 1988 and 2008, he showed that those who particularly lost out on any relative gain in income were the global upper middle class (those between the 75th and 90th percentiles on the global income distribution) and the poorest 5% of the world population. Of these least successful percentiles, 86% of the population were from mature economies in the global North (Lakner and Milanovic, 2016, 23). Considering these contrasts more widely, a growing body of evidence shows that the global North’s dominance in the global economy is receding, with the share of high-income countries in global GDP having fallen from 76.8% in 2000 to 65.2% in 2015 (see Figure 1).

A different picture emerges in the global South. In Figure 1, it was Asians who comprised 90% of the population in the percentiles which did best in terms of relative income gains from 1988 to 2008 (Lakner and Milanovic, 2016, 223). The UNDP has remarked that

A striking feature of the world scene in recent years is the transformation of many ~~developing~~ countries into dynamic economies…doing well in economic growth and trade … they are collectively bolstering world economic growth, lifting other ~~developing~~ economies, reducing poverty and increasing wealth on a grand scale. (UNDP, 2013, 43)

The share of global GDP of low and middleincome countries increased from 22.5% in 2000 to 34.1% in 2015 (Figure 2). Much of this increase is accounted for by China, as well as India and Brazil. Their share of global GDP, only 4.6% in 1960, 6.6% in 1990 and 9.3% in 2000, had almost doubled in the 21st century to 18% by 2015.

The development context of the global South has changed significantly since the turn of the Millennium, across a variety of important indicators. The total number of people in the world living on less than $1.90 per day (i.e. extreme poverty) has more than halved from 1.69 billion in 1999 to 766 million in 2013. At least by official estimates, the share of the population in the global South who are living in extreme poverty has fallen considerably this century. Whereas the percentage of the population in the global South with a daily consumption level of less than $1.90 was 33.4% in 1999, it was just 13.4% in 2013.2 The percentage of the world’s countries classified by the World Bank as low-income, albeit a very low threshold, more than halved within the first 15 years of the 21st century. Moreover, the total number of countries which are highly dependent on aid (having a net ODA > 9% of GNI) has fallen considerably, from 42 in 2000 to 29 in 2015, or from 34.1% to 23.2% of all low and middle-income countries with data available over that period.3

Considered overall, in comparison with the 1990s, the global South, in aggregate, now earns a much larger share of world GDP, has more middle-income countries, more middleclass people, less aid dependency, considerably greater life expectancy and lower child and maternal mortality. Table 1 provides some summary indicators for high-income countries (HICs) and low and middle-income countries (L&MICs), as somewhat imperfect approximations for global North and South.

After two hundred years of a ‘divergence, big time’ (Pritchett, 1997) between developed and ~~developing~~ countries following the Industrial Revolution, recent measurements suggest a change in the pattern of global inequality across a number of indicators (Horner and Hulme, 2017). The Global GINI of income distribution across all individuals in the world has fallen from 69.7 in 1988 to 66.8 in 2008 and 62.5 in 2013 (World Bank, 2016, 81). Analysis presented in the World Bank’s Taking on Inequality (2016) suggests that, in 1998, 26% of global income inequality was related to differences within countries, with the remaining 74% relating to differences among countries. By 2013, these shares were 35 and 65%. Two hundred years of a great divergence between global North and South now seems to have had some reversal, although more than half of an individual’s income can be accounted for by the country where he/she lives or was born (Milanovic, 2013). Inter-country inequality, rather than intra-country inequality, is still dominant, but it accounts for a diminished share of income-based and other inequalities (World Bank, 2016).

### 2AC ⁠— Permutation

### 4

#### Activism is key to local movements international resonance

Downing 14, Professor Emeritus of International Communication at the College of Mass Communication & Media Arts, Southern Illinois University (John D. H. Downing, 2014, “Social Movements’ Media: Evaluating Fresh Perspectives,” International Journal of Communication 8, http://ijoc.org/index.php/ijoc/article/viewFile/2918/1149

The final text 3 to be considered is Ingrid Hoofd’s (University of Singapore) detailed polemic against crucial flaws she proposes in current common understandings of alter-globalist activism. With her highly committed background in projects such as Indymedia and The Next Five Minutes media activism, conferences that used to take place in Amsterdam and her still resolutely feminist, anti-racist, and anti-corporate views, Hoofd nonetheless vigorously argues that these flaws terminally vitiate progress toward a socially just planet. In Ambiguities of Activism: Alter-Globalism and the Imperatives of Speed, her sights are set on three spaces: digital media activism, especially Indymedia; no-borders activism with reference to migrant workers and refugees; and climate activism. Her argument, reduced to—she might well say, cheapened beyond—its core, is that current activism in all three of those spaces, compulsively yet unawares, frames itself according to what it seeks to challenge, namely, the domination of transnational capital moving at a dizzying pace to penetrate every pore of planetary life. Throughout the book, Hoofd’s master term for this process is what she calls, inspired by Paul Virilio, “speed-elitism.” This, she asserts, is a way to capture the essence of contemporary transnational capital. But in her argument, activists currently are all too often voluntary victims of and missionaries for speed-elitism’s deepest logic. To mount this case, she leans very heavily indeed on Derrida. The principle of immanent critique, and of acknowledging our inescapable burial as critical thinkers in the given dynamics of human society, is central to her argument, as is the absurdity of thinking we can somehow transcend that fact by an act of the will. In that sense, as she reiterates throughout, her plea is not to go home and stop agitating, but to engage in auto-critique in the certainty that without it we are lost. In the current era, this means a radical rejection of the fascination with speed that she perceives in activist practice and theory. The absorption with forms of rapid mobilization enabled by high-tech communication tools, the notion of the Migrant as the instantaneous Dissolver of Borders/Herald of the Frontier-Free Future, and the urgency with which drastic ecological intervention is insisted upon despite the inexorable complexity of successful intervention are all instances of the fetishization of speed. Hoofd in response calls for a metaphorical slowing down to enable actual debate and dialogue well beyond the favored circles of intellectuals who write about and discuss constructive social change. With some of her critique, at intervals, I find myself in agreement, especially in Chapter 3 on how the figure of the Migrant features in some contemporary political theory and also with her scorn for Michael Hardt’s and Antonio Negri’s quasi-mystical pronunciamentos about the tide of history in Empire and Multitude. But (unfortunately, for this reviewer), Hoofd seems to feel the most pressing need is to attack the problem on the terrain of post-structuralist theory. Having myself in a recent seminar suffered a right derrida (lower-case “d” as intended) to the jaw from one of Jacques’s advocates, who seemed to think that simply mentioning a piece by his hero would be enough to flatten or at least shame me, at present I might be thought unduly sensitive in this matter. Perhaps the only way critically to unsettle activist worshippers at the Hardt and Negri shrine, and those of Italy’s post-operaismo school, is to menace them with even more senior deities such as Derrida. Hoofd’s sense of the empirical realities of the migrant worker experience, for example, do come through from time to time, but somehow play second fiddle to getting the authentic theoretical formulas right. And her defensive insistence on the legitimacy of critiquing “progressive” conceptual panaceas becomes repetitious, especially in the first chapter. There is, in other words, a worthwhile and important argument about contemporary activism, including Internet activism, made by Hoofd, but the hoops it is made to jump through risk obscuring it. The obligations of instantaneity and always-on mobilization do threaten to mirror the velocity of global capital flows and to draw attention away from the messier, far less exciting, and sometimes turgid process of trying to move the planet forward equitably—not by G8 or G20, but by a mass of local-to-transnational fora operating over time, supported and fed by all kinds of cultural activism.

# 1AR

## Case

### 2AC---!---Cyber

#### Cyber conflict goes nuclear---critical infrastructure causes tit-for-tat escalation, and ill-established redlines and use-it-or-lose-it mentality pressures advisors to assume the worst---that’s Klare.

### 2AC---Solvency---Cybersecurity

#### Plan reintroduces cybersecurity competition to the market---that’s key:

#### 1---monopolies irresponsibly divest from product security because market position is secured.

#### 2---multiple providers enables heterogenous network development that is insulated from catastrophic attacks---that’s Duan.

### 1AR---!---Cyber

#### Cyber attacks are coming now---1ac Jervis says North Korea, Russia, and China are looking to infiltrate vital US cyber systems. That causes tit-for-tat escalation and global destruction---any risk outweighs because it’s the only external offense

#### That must outweighs---human life is an intrinsic good, and nuclear war has a disproportionate impact on minority populations because of global warming and city center targeting---that’s Scarry. The only people that would survive are white elites in bunkers like Bezos and Elon Musk.

#### No terminal to interventions AND impact d on the K

#### Our arg is that securitzation is good because elites downplay the risk

#### Solar winds do escalate---dropped motive AND intent

#### Our reps are good because the advantage AND Lewis is a double turn---says deterrence good

#### Securitization is good---creates action and response to stop nuclear war---that’s Kanisis and Scarry

## K---Preempts

### 1AR ⁠— Conditionality

#### Conditionality’s a voter ⁠— it disincentivizes alt offense, which is the locus of time and strategy against the K given that links are unpredictable ⁠— that causes shallow debates and undermines clash, which precedes framework — no cross-applications because they are not contextualized

#### Independently, their ethics are conditional because this PIC agreed the plan was good

#### Their appeal to “1 off” proves our arg ⁠— the only reason it was conditional was to take away aff responses

#### Dispo solves ⁠— it gives the option to straight turn alts---dropped

## K---Baylor

#### \*Growth is sustainable---climate change is shifting economic incentives towards reducing emissions.

Henderson 20, John and Natty McArthur University Professor @ Harvard (Rebecca, May/June Issue, “The Unlikely Environmentalists: How the Private Sector Can Combat Climate Change,” Foreign Affairs, https://www.foreignaffairs.com/articles/world/2020-04-13/unlikely-environmentalists)

There’s a reason climate change is often described as a “wicked problem.” Fully decarbonizing the economy will require not only completely transforming the global energy infrastructure, at a cost of many trillions of dollars, but also retrofitting all of the world’s buildings, remaking the planet’s agricultural practices, and revolutionizing transportation systems. It is difficult to see how this can be accomplished without some kind of global carbon tax or regulatory regime. But putting such a system in place is proving to be enormously difficult. The 2015 Paris agreement on climate change was a good first step, but many countries show little sign of meeting the commitments they made as part of that agreement, and the United States’ withdrawal from the process has presented a significant barrier to further progress. Given the slowing global economy and the slide toward populism and nationalism in much of the world, the prospects for any kind of comprehensive global accord seem increasingly remote. So far, at least, the public sector is failing to confront the problem. But the private sector has begun to step in to fill the vacuum. In January, Larry Fink, the CEO of BlackRock, the largest asset manager in the world, declared that “climate risk is investment risk” and announced that going forward BlackRock would ask every firm in its portfolio to disclose its carbon emissions. BlackRock has roughly $7 trillion under management and is one of the largest shareholders in nearly every publicly traded firm in the world. So companies around the world paid attention when Fink went on to say that BlackRock would consider voting against boards whose firms “do not make sufficient progress” in addressing climate-related risks and would cease to invest altogether in some fossil fuel projects. Fink is not alone. Many of the world’s largest asset owners are coming to the conclusion that climate change is the most important risk to the long-term health of their portfolios. More than a third of global invested capital—about $19 trillion—is controlled by the world’s 100 largest asset owners. Nearly two-thirds of this money is in pension funds; the remaining third is in sovereign wealth funds. These funds are now so large that they are sometimes referred to as “universal owners” or “universal investors” since, in effect, they hold the entire market. For that reason, they cannot diversify away from the risk of climate change—a risk that Mark Carney, who until earlier this year was the governor of the Bank of England, suggested could result in an abrupt financial collapse, potentially wiping out as much as $20 trillion of assets. To avert that kind of calamity, major asset owners are starting to push the companies in their portfolios to address climate change. This trend is not driven by altruism or a deep commitment to the environment: it’s a function of economic interests. For the world’s largest asset owners, climate change is not an externality—it is a profound threat to their long-term returns. It will, after all, be significantly harder to make money in a world where most of the major ports are underwater, harvests are failing on a routine basis, and hundreds of millions of people are on the move. As more and more major asset owners come to this realization, it is creating increasingly strong incentives for them to cooperate with one another in support of large-scale decarbonization. Together, they are pressing the firms in their portfolios to set concrete targets for emission reductions and to make progress toward meeting those targets, potentially solving the problem posed by firms’ unwillingness to cut their emissions unless they can be assured that their competitors will follow suit. Someone, however, will need to monitor that progress and sanction firms that lag behind—a role that would be best filled by government regulators. The need for such public-sector involvement will likely increase private-sector support for the policy changes required to drastically reduce carbon emissions. In this way, private-sector pressure may serve as the force that finally breaks the political logjam that has long blocked the public action needed to solve the climate crisis. MONEY TALKS One of the most promising examples of what this might look like in practice is Climate Action 100+, a nonprofit affiliation of more than 300 investors who collectively control nearly half of the world’s invested capital. The group was founded in 2017 with the goal of persuading the world’s 100 largest private-sector carbon emitters to “cut the financial risk associated with catastrophe” by putting in place board-level processes to assess their climate-related risks and oversee plans for dealing with them, pledging to clearly disclose those risks, and taking action to reduce greenhouse gas emissions across their value chains rapidly enough to help meet the Paris agreement’s goal of limiting the increase in the global average temperature to well below two degrees Celsius. In December 2018, a group of investors belonging to Climate Action 100+ published a letter in the Financial Times listing some specific steps they were demanding of companies in which they invest, including “the rapid elimination of coal use by utilities in EU and OECD [Organization for Economic Cooperation and Development] countries by no later than 2030.” Six months later, investors from the consortium pushed the oil giant Shell to announce short-term targets for limiting its greenhouse gas emissions and persuaded BP to support a shareholder resolution that binds the oil company to disclose the carbon intensity of its products, the methodology it uses to consider the climate impact of new investments, and its plans for setting and measuring emission targets. More than half of the 40 oil and gas companies with which the group has engaged have set long-term quantitative targets for reducing their emissions. And the group has helped persuade the shipping giant Maersk and two of the world’s largest mining companies, ArcelorMittal and Thyssenkrupp, to commit to becoming carbon neutral by 2050. These kinds of commitments are sometimes dismissed as mere greenwashing: public relations stunts designed to buy time. And sometimes they are. But they might also help catalyze an economic transformation that could play a major role in arresting climate change. Of course, large asset holders are not the only players who shape a company’s incentives: employees and consumers do, as well, and they are increasingly insisting that firms go green—and rewarding them when they do. For example, after the consumer goods giant Unilever announced that it planned to cut its carbon footprint in half and double its revenue at the same time—and then followed through by transforming its operations, brand by brand—the firm joined Facebook, Google, and Microsoft on LinkedIn’s list of the ten most desirable employers in the world. Sales of Unilever’s “sustainable living” brands—which include Ben & Jerry’s, Dove, and Vaseline and which Unilever claims “contribute to achieving the company’s ambition of halving its environmental footprint”—are growing 69 percent faster than the rest of the business and providing 75 percent of the company’s growth. Shifting public attitudes about climate change and public policies intended to combat it have also created clear business opportunities. Solar and wind energy are both multibillion-dollar businesses. The market for plant-based alternatives to meat is exploding. And global recycling could generate close to $400 billion in the next five years. RISKY BUSINESS But embracing the innovation that is required to exploit new opportunities is often risky and expensive. The venture capital industry lost at least $10 billion between 2005 and 2011 investing in clean energy technology. An electric utility that commits to phasing out coal plants might reap the benefits of declining solar and wind energy costs, but it could also misjudge the market and significantly increase its costs. An automobile company that invests in developing electric vehicles might leap ahead of its competitors, but it could also risk losing out to more cautious rivals. Universal investors can help mitigate those risks by funneling capital to firms that are willing to make the first move. This can be transformational in itself, since companies that decide to embrace new opportunities can often persuade an entire industry to follow them. Walmart’s massive investments in energy saving and waste reduction, for example, have helped persuade many other companies to take similar steps. Since 2010, the price of battery storage has fallen by at least 73 percent, a change driven largely by the electric vehicle company Tesla’s significant investments in the technology, which spurred the company’s competitors to invest more than $90 billion in the development of electric vehicles. Major asset holders can also push companies to commit to aggressive targets for decarbonizing their business models and insist that they report on their progress. In this way, universal investors may be able to force every firm in an industry to act, solving the collective action problem inherent in tackling climate change. Firms don’t naturally act collectively—for all kinds of reasons, including antitrust law. But when there exists a clear business case for doing so and cooperation can be credibly enforced, voluntary cooperation can be an effective means of creating or preserving public goods. Nearly half of the world’s inshore fisheries are managed through some form of cooperative agreement. Most of the rules governing international trade are designed and enforced by the International Chamber of Commerce, a voluntary association founded in 1919. Some of the world’s largest firms are increasingly exploring whether these kinds of voluntary agreements might be an effective way to reduce emissions. For example, after Unilever came under pressure from activists to stop using palm oil, the cultivation of which contributes to deforestation, Paul Polman, who was then the company’s CEO, was able to persuade many of his fellow consumer goods CEOs that continuing to purchase conventionally produced palm oil presented a significant threat to their own brands. Partly as a result, more than 60 percent of the world’s traded palm oil is now covered by sustainability commitments. Similar agreements with respect to soy and beef have greatly slowed rates of deforestation in the Amazon River basin. And companies in industries as diverse as airlines, food, retail, apparel, travel, hospitality, construction, health care, and high technology have begun to coordinate to reduce carbon emissions across supply chains, so that no single firm is placed at a disadvantage by going green. Such arrangements produce a wealth of knowledge about what effective decarbonization might look like on the ground. As one might expect, however, they are often unstable and difficult to enforce, since no mechanism exists through which to punish firms that drag their feet or refuse to conform. Here, universal investors might be able to make a significant difference by acting as enforcers. If BlackRock, for example, follows through on its threat to vote against the boards of companies that do not adequately disclose their climate emissions, every major firm in every industry will be forced to report—in an auditable, replicable way—the degree to which it is meeting its commitments. And if the world’s major investors then vote against the boards of those companies that are falling behind, investors could catalyze the transformation of entire industries. THE EARTH LOBBY Arresting climate change will still require government action, of course, and the changes afoot in finance and the corporate world could ease the path. As firms commit to reducing their carbon emissions, they are increasingly recognizing that the most effective way to ensure that they are not undercut by lagging companies is to press for regulation. Together, they are creating a constituency for effective climate policy. In 2017, for example, when U.S. President Donald Trump declared that he was going to withdraw the United States from the Paris agreement, the CEOs of more than 50 U.S. companies, including Apple, Gap, Google, HP, and Levi Strauss, published an open letter urging him to rethink the decision. When Trump stuck to his plan, Elon Musk, the CEO of Tesla, and Bob Iger, then the CEO of Disney, resigned from some of the president’s advisory councils in protest. More than 2,000 companies have joined a collaborative effort called “We Are Still In,” a group working to ensure that the United States meets its commitments under the agreement despite the administration’s withdrawal. The group includes not only businesses but also states, cities, religious organizations, and universities. Together, they represent 68 percent of U.S. GDP, 65 percent of the U.S. population, and the source of more than half of all U.S. carbon emissions. Such action independent of the federal government could make a big difference. According to America’s Pledge, a nongovernmental organization that tracks local progress toward emission reductions, the “full achievement of already on-the-books policies from state and local actors—paired with rapidly shifting economics in the power sector—would reduce emissions 19 percent below 2005 levels by 2025 and 25 percent below 2005 levels by 2030.” This would be a significant step toward the approximately 50 percent reduction in emissions that the UN’s Intergovernmental Panel on Climate Change estimates is necessary to avoid the most dangerous potential outcomes of climate change. These efforts and others like them also have the potential to change the nature of the political conversation around climate change. In an increasingly partisan world, firms occupy a unique position. According to the 2019 Edelman Trust Barometer, an annual survey measuring credibility and trust, business is now the world’s most trusted institution, and 71 percent of employees around the world agree that “it is critically important” for the CEOs of their companies “to respond to challenging times.” A broad-based movement among the world’s biggest companies to tackle climate change could help legitimate the idea that climate change is a real danger, that acting to avert it could be a major driver of innovation and economic growth, and that appropriate public policy could be enormously helpful. Such a movement could also put increasing pressure on companies that resist decarbonizing. One of the reasons that climate regulation has stalled in the United States is that a small minority of firms have invested billions of dollars in actively lobbying against it. If their peers start to push for regulation and highlight the dangers inherent in continuing with business as usual, those laggards will be compelled to change their behavior. One day soon, flooding the political process with money to defend the burning of fossil fuels could be seen as an unacceptable reputational risk—or even as morally indefensible. For many years, experts have assumed that the fastest and most efficient route to global decarbonization is coordinated state action. But as the world’s political institutions have come under pressure, such action has become increasingly elusive. Against this background, the growing understanding that climate change presents a profound threat to the long-term returns of the world’s largest asset owners provides some reason for hope. As investors push for change and the realization dawns in more and more boardrooms that the benefits of climate action will outweigh the costs, it is possible that leading-edge firms could trigger a cascade of reinforcing reforms, transforming the economics of individual industries and creating a significant constituency for political action. For decades, when it came to addressing climate change, large asset holders and big companies acted more as obstacles than as catalysts. Those days may soon be over.

### 1AR ⁠— AT: Unsustainability

#### Ag sustainable

McAfee 19, \*Andrew Paul McAfee, a principal research scientist at MIT, is cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management; (2019, “More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources and What Happens Next”, https://b-ok.cc/book/5327561/8acdbe)

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.

#### Warming stuff solves carbon bubble AND didn’t read a bio-d impact---de-coupling reduces human impact on the environment---the alt can’t it because consumption is inevitable anyway

#### No peak oil and we solve

McAfee 19, \*Andrew Paul McAfee, a principal research scientist at MIT, is cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management; (2019, “More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources and What Happens Next”, https://b-ok.cc/book/5327561/8acdbe)

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.

#### No metals

McAfee 19, \*Andrew Paul McAfee, a principal research scientist at MIT, is cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management; (2019, “More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources and What Happens Next”, https://b-ok.cc/book/5327561/8acdbe)

Overcoming the Limits

A great way to see what happens when capitalism and tech progress combine is to look back at 1972’s The Limits to Growth, which we first came across in chapter 4. It’s a fascinating document for two reasons. First, it’s one of the most Malthusian books written since Malthus. It’s far gloomier than anything Jevons came up with. The team behind The Limits to Growth tried to model the future of the exponentially growing world economy and concluded, “We can thus say with some confidence that, under the assumption of no major change in the present system, population and industrial growth will certainly stop within the [twenty-first] century, at the latest. The system… collapses because of a resource crisis.”

Second, The Limits to Growth provided an invaluable service by recording what the known global reserves of important resources were in 1972. “Known global reserves” are the deposits of a resource that can be profitably extracted given the prevailing knowledge and state of technology. The authors of The Limits to Growth included the known reserves of many resources to show how inadequate they were in the face of exponential growth of both output and resource consumption. The authors had little reason to suppose in the early 1970s that either kind of growth would stop on its own. As we saw in chapter 4, resource consumption went up in lockstep with overall economic output all throughout the twentieth century up to Earth Day. Few people expected that to change. The team behind The Limits to Growth certainly didn’t.

The most generous estimate of future resource availability included in The Limits to Growth assumed that exponential consumption would continue, and that proven reserves were actually five times greater than commonly assumed. Under these conditions, the team’s computer models showed that the planet would run out of gold within twenty-nine years of 1972; silver within forty-two years; copper and petroleum within fifty; and aluminum within fifty-five.

These weren’t accurate predictions.

We still have gold and silver, and we still have large reserves of them. In fact, the reserves of both are actually much bigger than in 1972, despite almost half a century of additional consumption. Known global reserves of gold are almost 400 percent larger today than in 1972, and silver reserves are more than 200 percent larger. And it’s probably not too early to say that we’re not going to run out of copper, aluminum, and petroleum as quickly as estimated in The Limits to Growth. Known reserves of all are much larger than they were when the book was published. Known aluminum reserves are almost twenty-five times what they were in the early 1970s.

How could these predictions about resource availability, which were taken seriously when they were released, have been so wrong? Because the Limits to Growth team pretty clearly underestimated both dematerialization and the endless search for new reserves. Capitalism and tech progress combine to drive both of these trends—the use of fewer resources and the hunt for more of them—and neither of these two drivers is about to become less powerful. So we’ll continue to innovate our way to greater dematerialization while we keep finding more reserves.

The counterintuitive conclusion from this line of reasoning is that resource scarcity isn’t something we need to worry about. The earth is finite, so the total quantity of resources such as gold and petroleum is limited. But the earth is also very, very big—big enough to contain all we need of these and other resources, for as long as we’ll need them. The image of a thinly supplied Spaceship Earth hurtling through the cosmos with us aboard is compelling, but deeply misleading. Our planet has amply supplied us for our journey. Especially since we’re quickly slimming, swapping, optimizing, and evaporating our way to dematerialization.

#### Cap solves war:

#### 2---transition wars---turns environment quicky.

Smith 19, assistant professor of finance @ Stony Brook University (Noah, April 5th, “Dumping Capitalism Won’t Save the Planet,” *Bloomberg*, <https://www.bloomberg.com/opinion/articles/2019-04-05/capitalism-is-more-likely-to-limit-climate-change-than-socialism>, Accessed: 07-15-19)

The climate threat is certainly dire, and carbon taxes are unlikely to be enough to solve the problem. But eco-socialism is probably not going to be an effective method of addressing that threat. Dismantling an entire economic system is never easy, and probably would touch off armed conflict and major political upheaval. In the scramble to win those battles, even the socialists would almost certainly abandon their limitation on fossil-fuel use — either to support military efforts, or to keep the population from turning against them. The precedent here is the Soviet Union, whose multidecade effort to reshape its economy by force amid confrontation with the West led to profound environmental degradation. The world's climate does not have several decades to spare.

### 1AR ⁠— Framework