# Wake\_RD3

# 1AC

## 1AC---SSO’s

### 1AC---Innovation ADV

#### Advantage 1 is Innovation:

#### The Ninth Circuit’s recent decision in *FTC v. Qualcomm* permits information technology firms to engage in innovation-stifling conduct with antitrust impunity. Firms have been given free reign to license standard-essential patents (SEP’s) at a surcharge and evade commitments to license on Fair, Reasonable, and Non-Discriminatory (FRAND) terms.

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Standards can enhance competition and consumer choice, but they also massively inflate the value of patents deemed essential to the standard, and give their owners the power to sue companies that implement the standard for money damages or injunctions to block them from using their SEPs. When standards cover critical features like wireless connectivity, SEP owners wield a huge amount of “hold-up” power because their patents allow them to effectively block access to the standard altogether. That lets them charge unduly large tolls to anyone who wants to implement the standard.

To minimize that risk, standard-setting organizations typically require companies that want their patented technology incorporated into a standard to promise in advance to license their SEPs to others on fair, reasonable, and non-discriminatory (FRAND) terms. But that promise strikes at a key tension between antitrust and patent law: patent owners have no obligation to let anyone use technology their patent covers, but to get those technologies incorporated into standards, patent owners usually have to promise that they will give permission to anyone who wants to implement the standard as long as they pay a reasonable license fee.

Qualcomm is one of the most important and dominant companies in the history of wireless communication standards. It is a multinational conglomerate that has owned patents on every major wireless communication standard since its first CDMA patent in 1985, and it participates in the standard-setting organizations that define those standards. Qualcomm is somewhat unique in that it not only licenses SEPs, but also supplies the modem chips used by a wide range of devices. These include chips that implement wireless communication standards, which lie at the heart of every mobile computing device.

Although Qualcomm promised to license its SEPs (including patents essential to CDMA, 3G, 4G, and 5G) on FRAND terms, its conduct has to many looked unfair, unreasonable, and highly discriminatory. In particular, Qualcomm has drawn scrutiny for bundling tens of thousands of patents together—including many that are not standard-essential—and offering portfolio-only licenses no matter what licensees actually want or need; refusing to sell modem chips to anyone without a SEP license and threatening to withhold chips from companies trying to negotiate different license terms; refusing to license anyone other than original-equipment manufacturers (OEMs); and insisting on royalties calculated as a percentage of the sale price of a handset sold to end users for hundreds of dollars, despite the minimal contribution of any particular patent to the retail value.

In 2017, the U.S. Federal Trade Commission [sued](https://www.ftc.gov/news-events/press-releases/2017/01/ftc-charges-qualcomm-monopolizing-key-semiconductor-device-used) Qualcomm for violating both sections of the Sherman Antitrust Act by engaging in a number of anticompetitive SEP licensing practices. In May 2019, the U.S. District Court for the Northern District of California agreed with the FTC, identifying numerous instances of Qualcomm’s unlawful, anticompetitive conduct in a comprehensive [233-page opinion](https://www.eff.org/document/ftc-v-qualcomm-district-court-opinion). We were pleased to see the FTC take action and the district court credit the overwhelming evidence that Qualcomm’s conduct is corrosive to market-based competition and threatens to cement Qualcomm’s dominance for years to come.

But this month, a panel of judges from the Court of Appeals for the Ninth Circuit unanimously [overturned](https://www.eff.org/document/ninth-circuit-opinion-ftc-v-qualcomm) the district court’s decision, reasoning that Qualcomm’s conduct was “hypercompetitive” but not “anticompetitive,” and therefore not a violation of antitrust law. To reach that result, the Ninth Circuit made the patent grant more powerful and antitrust law weaker than ever.

According to the Ninth Circuit, patent owners don’t have a duty to let anyone use what their patent covers, and therefore Qualcomm had no duty to license its SEPs to anyone. But that framing requires ignoring the promises Qualcomm made to license its SEPs on reasonable and non-discriminatory terms—promises that courts in this country and around the world have consistently enforced. It also means ignoring antitrust principles like the essential facilities doctrine, which limits the ability of a monopolist with hold-up power over an essential facility (like a port) to shut out rivals. Instead, the Ninth Circuit held rather simplistically that a duty to deal could arise only if the monopolist had provided access, and then reversed its policy.

But even when Qualcomm restricted its licensing policies in critical ways, the Ninth Circuit found reasons to approve those restrictions. For example, Qualcomm stopped licensing its patents to chip manufacturers and started licensing them only to OEMs. This had a major benefit: it let Qualcomm charge a much higher royalty rate based on the high retail price of the end user devices, like smartphones and tablets, that OEMs make and sell. If Qualcomm had continued to license to chip suppliers, its patents would be “exhausted” once the chips were sold to OEMs, extinguishing Qualcomm’s right to assert its patents and control how the chips were used.

Patent exhaustion is a century-old doctrine that protects the rights of consumers to use things they buy without getting the patent owner’s permission again and again. Patent exhaustion is important because it prevents price-gouging, but also because it protects space for innovation by letting people use things they buy freely, including to build innovations of their own. The doctrine thus helps patent law serve its underlying goal—promoting economic growth and innovation. In other words, the doctrine of exhaustion is baked into the patent grant; it is not optional. Nevertheless, the Ninth Circuit wholeheartedly approved of Qualcomm’s efforts to avoid exhaustion—even when that meant cutting off access to previous licensees (chip-makers) in ways that let Qualcomm charge far more in licensing fees than its SEPs could possibly have contributed to the retail value of the final product.

It makes no sense that Qualcomm could contract around a fundamental principle like patent exhaustion, but at the same time did not assume any antitrust duty to deal under these circumstances. Worse, it’s harmful for the economy, innovation, and consumers. Unfortunately, the kind of harm that antitrust law recognizes is limited to harm affecting “competition” or the “competitive process.” Antitrust law, at least as the Ninth Circuit interprets it, doesn’t do nearly enough to address the harm downstream consumers experience when they pay inflated prices for high-tech devices, and miss out on innovation that might have developed from fair, reasonable, and non-discriminatory licensing practices.

We hope the FTC sticks to its guns and asks the Ninth Circuit to go en banc and reconsider this decision. Otherwise, antitrust law will become an even weaker weapon against innovation-stifling conduct in technology markets.

#### Qualcomm’s ability to evade its FRAND commitment can be traced to a failure on the part of Standard Setting Organization’s (SSO’s) to reasonably define and enforce their IPR policies. Patent holdup is real, and antitrust enforcement is necessary to manage it.

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C. A Limited Role for Antitrust in Promoting, Not Impeding, Competition

We favor an important but limited role for antitrust to control patent holdup. One of the authors has previously expressed skepticism of broad antitrust enforcement against patent holdup.129 But the critical point Lemley made there is that, for the most part, we do not need antitrust if patent and contract law effectively enforce the private solutions SSOs have developed to the holdup problem.130 In his more temperate moments, Delrahim adds an important caveat that, if taken seriously, might align him more with us: “[A]ntitrust law should play no role in policing unilateral FRAND commitments where contract or common law remedies would be adequate.”131 Unfortunately, he seemed to drop that caveat in the joint December 2019 statement with the PTO abandoning long-standing policy on FRAND commitments. There, the Division and the PTO took the position that patentees should be entitled to a full range of patent remedies, explicitly including injunctions, even if they had committed to license the patents on FRAND terms.132 As Herbert Hovenkamp has noted, the Justice Department’s position contradicts established law on injunctive relief and FRAND.133

Even the more limited version of the statement is problematic. If courts effectively enforce FRAND commitments, most of the holdup problem can be solved without resort to antitrust. But antitrust still has an important role to play when contract law and anti-fraud laws fail to fully address the patent holdup problem.134

The FTC’s case against Qualcomm provides a good example of why antitrust is needed. In that case, the District Court found that Qualcomm had breached its FRAND commitment and used its monopoly power over modem chips to pressure its customers (Original Equipment Manufacturers, or “OEMs”) to pay a royalty surcharge for Qualcomm’s SEPs on top of the reasonable royalty rates that Qualcomm would otherwise have been able to obtain. Qualcomm imposed this surcharge when Qualcomm’s customers purchased modem chips from Qualcomm’s rivals.135 The District Court correctly found that Qualcomm’s royalty surcharge acted like a tax when Qualcomm’s customers purchased modem chips from Qualcomm’s rivals.136 Based on this reasoning, the District Court correctly found that Qualcomm’s “no-license/no-chips” policy harmed competition by raising rivals’ costs and thereby excluding them, and that this same conduct also harmed Qualcomm’s customers.137

The Ninth Circuit reversed, making basic errors of both economics and law.138 On the economics, the Ninth Circuit mistakenly concluded that “Qualcomm’s royalties are ‘chip-supplier neutral’ because Qualcomm collects them from all OEMs that license its patents, not just ‘rival’s customers.’”139 This is flatly incorrect, because the royalty surcharge reduces the gains from trade between an OEM and a rival modem-chip supplier but does not reduce the gains from trade between the OEM and Qualcomm.140 Based on this error, the Ninth Circuit states incorrectly: “The FTC identifies no such harm to competition.”141

On the law, the Ninth Circuit rejects the well-established principle that harming customers can be a way of harming competition: “[T]he primary harms the district court identified here were to the OEMs who agree to pay Qualcomm’s royalty rates—that is, Qualcomm’s customers, not its competitors. These harms were thus located outside the ‘areas of effective competition’—the markets for CDMA and premium LTE modem chips.”142 The notion that harms to customers in the relevant market are outside the scope of the antitrust laws is simply bizarre.

In any event, as noted above, the District Court also found harm to Qualcomm’s rivals in both of the relevant markets it identified. The Ninth Circuit further erred by stating that “the district court’s ‘anticompetitive surcharge’ theory fails to state a cogent theory of anticompetitive harm.”143 The Ninth Circuit’s logic at this point assumes that Qualcomm’s royalties reflect the value of its SEPs, but that is directly contrary to the District Court’s finding that Qualcomm used its monopoly over modem chips to obtain a royalty surcharge, above and beyond the royalties Qualcomm could obtain based on its SEPs.144 One cannot dismiss findings regarding the effects of a royalty surcharge by assuming away that very surcharge. Hopefully the Supreme Court will correct these blatant errors.

Qualcomm’s use of its separate monopoly power over modem chips to evade its FRAND commitment couldn’t be remedied in contract, making antitrust enforcement a necessity for reasons beyond simply enforcing the FRAND deal.145 In the standard-setting context, if a SEP owner breaches its FRAND commitment and is thereby able to charge unreasonably high royalties to device manufacturers, those royalties are likely to be passed through in large part to final consumers. Antitrust enforcement can protect consumers from these overcharges.146

But to the extent that antitrust can step back in some settings, that is only possible because the market participants have recognized and responded effectively to the patent holdup problem by requiring reasonable licensing terms, and because the courts have enforced that requirement in contract or patent law. The second prong of the Antitrust Division’s attack on FRAND commitments therefore undermines whatever merit there might be to the first prong. While on the one hand Delrahim says that we don’t need antitrust because contract and equity will solve the patent holdup problem, on the other hand he is advocating policies that make it harder for contract and patent law to solve that very problem. Threatening SSOs with liability—maybe even per se liability—for trying to stop SEP holdup undermines the very contractual solution on which Delrahim purports to rely. So too do Delrahim’s periodic claims that holdup is a good thing, or at least something we should accept,147 his incorrect claim that patent holdout is a bigger problem than patent holdup,148 and his advocacy for undoing or avoiding eBay and giving a patent owner the right to an automatic injunction.149 Indeed, under Delrahim, the Antitrust Division evidently objects even to voluntary commitments by patent owners not to seek an injunction as part of the standard-setting process.150 Ironically, this assault on SSOs and FRAND policies may actually necessitate more antitrust intervention in standard-setting. If the DOJ encourages companies like Qualcomm to ignore their FRAND commitments, and if the DOJ discourages SSOs from trying to solve the SEP holdup problem, or impedes their efforts to do so, antitrust may ultimately have to step in to protect a functioning market from SEP holdup.

CONCLUSIONS AND RECOMMENDATIONS

The theory of holdup is well-supported by a substantial body of empirical evidence. For valid conceptual and practical reasons, this empirical literature has not involved showing that large-scale actual holdups are common. Rather, the evidence generally comes in the form of efforts by private parties to contract around holdup.

The same types of evidence and the same standards regarding empirical work should be applied when testing the theory of patent holdup.

When such standards are applied, it is clear that the problem of patent holdup is substantial. Indeed, patent holdup, and especially SEP holdup, are very difficult strains of holdup to manage. Furthermore, the problem of patent holdup is quite common, since it arises whenever the efficient development of new products and services involves substantial investments that may turn out to be specific to another party’s patent portfolio. Not surprisingly, therefore, virtually all players in the high- tech industries affected by holdup participate in voluntary organizations where they agree to limit everyone’s rights (including their own) in an effort to pre-commit to avoid holdup.

Both the theory and the empirical work relating to patent holdup indicate that market participants have strong incentives to devise institutions to limit patent holdup. Considerable progress was made between 2006 and 2016 in controlling patent holdup in the United States, primarily through the courts, but also through competition policy enforcement. Unfortunately, some of that progress is now at risk due to a drastic shift in policy at the Antitrust Division of the Department of Justice. That shift is based on faulty economics, relies on flawed arguments, and is contrary to both patent law and the empirical evidence.

Rather than go backward, more forward progress is needed to manage and control patent holdup in general and SEP holdup in particular.

The costs caused by the problem of SEP holdup can be reduced if more SSOs follow the lead of the IEEE by clarifying and strengthening their patent policies. The SEP policies of many SSOs are certainly valuable, but efforts by Qualcomm and others to ignore or game their FRAND commitments show the necessity of SSOs being more explicit about just what their FRAND commitments entail.

The costs of SEP holdup can be reduced if the ITC joins the policy mainstream by recognizing that exclusion orders based on FRAND- encumbered SEPs are normally not in the public interest, provided the SEP owner has another available legal venue through which it can secure reasonable royalties. The White House reined in the ITC in 2013 when it sought to grant exclusion orders despite the patentee’s commitment to license the patents. The ITC should affirmatively apply that policy.

Most importantly, the courts should enforce reasonable SSO policies that target SEP holdup. Courts have been doing this as a matter of contract law, but patent owners seeking to engage in holdup have strong incentives to ignore or find ways to undermine, avoid, or evade their FRAND obligations. When they do so, antitrust must be willing to step in to protect competition and consumers by stopping patent holdup.

#### Anticompetitive conduct is escalating---weakened antitrust enforcement emboldens firms to follow Qualcomm’s lead, which collapses the integrity of standard-setting.

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While the FRAND process has been highly productive, it is also fragile. Firms are tempted to make commitments at the beginning when the incentive to join is large, but renege on them later when they can profit by doing so. At least in this particular case, private FRAND enforcement had not worked very well. Qualcomm had been able to violate FRAND commitments in order to exclude rivals and obtain higher royalties than FRAND would permit, largely with impunity. Other firms will very likely follow Qualcomm’s lead. If that happens the FRAND system will fall apart, doing irreparable injury to the modern wireless telecommunications network or, at the very least, diminishing the leadership role of the United States in preserving effective network competition.

While governments can be heavily involved in standard set-ting,9 the implementation of technical standards in information technologies is largely the work of private actors. Government involvement is limited mainly to enforcement of contract, intellectual property, or antitrust law. As private actors, those involved in standard setting or compliance are fully subject to the federal antitrust laws.

This Article addresses one question: when is an SSO participant’s violation of a FRAND commitment an antitrust violation, and if it is, of what kind and what are the implications for remedies? It warns against two extremes. One is thinking that any violation of a FRAND commitment is an antitrust violation as well. In the first instance FRAND obligations are contractual, and most breaches of contract do not violate any antitrust law. The other extreme is thinking that, because a FRAND violation is a breach of contract, it cannot also be an antitrust violation. The question of an antitrust violation does not de-pend on whether the conduct breached a particular agreement but rather on whether it caused competitive harm. This can happen because the conduct restrained trade under section 1 of the Sherman Act, was unreasonably exclusionary under section 2 of the Sherman Act, or amounted to an anticompetitive condition or understanding as defined by section 3 of the Clay-ton Act.10 The end goal is to identify practices that harm com-petition, thereby injuring consumers.

The Ninth Circuit’s Qualcomm decision will make antitrust violations in the context of FRAND licensing much more difficult to prove, even in cases where anticompetitive behavior and consumer harm seem clear.11 Indeed, in this case the court itself acknowledged the harm to consumers but appeared to think that they were not entitled to protection.12 If this decision stands, FRAND obligations will to a larger extent have to be settled through private litigation and the federal antitrust enforcement agencies will have a diminished role. Anticompetitive behavior by one firm that is not effectively disciplined will lead others to do the same thing.

#### A trusted and credible system for ICT innovation is vital for rapid tech diffusion and economic growth---absent FRAND, the system will collapse.

Bauer et al. 17, \*Matthias Bauer is Senior Economist at ECIPE; \*Fredrik Erixon is a Swedish economist and writer. He has been the Director of the European Centre for International Political Economy (ECIPE) ever since its start in 2006; (October 2017, “Standard Essential Patents and the Quest for Faster Diffusion of Technology”, https://ecipe.org/publications/standard-essential-patents/)

It is easy to take a pessimistic view about whether the system will break. If the current trend continues, the system is likely to break at some point for the simple reason that companies will not trust it anymore. The series of legal disputes witnessed over the past years – sometimes referred to as the “smartphone patent wars” – has been fodder for a pessimistic reading of “the two tales of SEPs”. While it is common in the business world that disputes over patents and licenses are settled in courts, various SEP disputes have revealed problematic aspects of the SEP market that are different from those disputes that follow the normal stream of business and contracts. Often, the SEP disputes are less concerned about the rights and boundaries of patents, and more about antitrust limits to market behavior: they concern market abusive practices and restrictions to competition as much as they are about intellectual property.

If the SEP system actually does break at some point, the consequences would be felt throughout the economy. SEPs have been a critical part of the ICT revolution. SEPs have allowed for the fast rates of innovation diffusion that the world has witnessed over the past quarter of a century. All the computer and Internet related products and services that people are now dependent upon for their private and professional lives are intricate webs of intellectual property. As many as 250,000 patents can be used to claim ownership of some technical specification or design element in a single smartphone (NYT 2012). A laptop, suggests one calculation, implements more than 250 interoperability standards (Biddle et al. 2010), and the number of SEP holders for 3G and 4G standards grew from 2 in 1994 to 130 in 2013 while the number of SEPs rose from fewer than 150 in 1994 to more than 150,000 in 2013 (Galetovic and Gupta 2016). The standardization-body ETSI has registered more than 150,000 declarations of SEPs from companies, and ETSI is just one of many bodies in the world of ICT standardization. For the 3G standard, the same body has about 24,000 patents that have been declared essential. Now, with the economy yet again on the threshold of big technological change, a trusted and credible system for creators and users of technology to standardize proprietary technology would be a boon for innovation, interoperability and – ultimately – the consumers.

And there are reasons for optimism. Although many of the problems in the SEP regimes need to be addressed, the numbers above indicate that the SEP system is in fact attractive to patent holders and SEP implementers. It is easy to see why: neither holders nor implementers are presented with alternative options that on the face of it would be far more profitable for them. In other words, there simply would not be as many patents declared as essential if both creators and users of technology believed the SEP system worked to their disadvantage or was grossly unfair. While the reality for some companies may be that legal disputes and unpredictability prompt them to find other ways than SEPs to get access to key technologies for their products, it remains the case that most stakeholders have strong economic incentives to maintain a balanced SEP system that is trusted.

First, standard essential patents are an asset for creators of technology because, by becoming essential to a standard, their volumes of sales for technologies that users value rise significantly. As many holders want to raise more revenues for their SEPs and – ideally – have the freedom to contract with buyers on their terms, they can expand their customer base when they agree to sell patented technology in accordance with a set of rules that are designed to prevent SEP holders exploiting the weakness of a customer that has grown dependent on having access to their technology.

Second, SEPs are hugely beneficial also to those that buy the licenses – the implementers or users. Through the SEP system, they can access technologies that are interoperable and work with different products and functionalities – and they can do it under conditions that, if history is a guide, in most cases give them stable and predictable terms of contract. As a consequence, both creators and users can focus on their competitive advantages and profit on the economies of scale and specialization. Downstream firms do not need to develop their own upstream technology and upstream firms do not need to package their technologies in end-customer products in order to make their products valuable.

Third, standard-setting organisations (SSOs) also have a big stake in an SEP system that works well – and, like creators and users of technology, they would stand to lose significantly if the SEP system were to collapse.

Lastly, the biggest beneficiaries are individual consumers – those who buy the end products using FRAND-conditioned SEPs. The advent of SEPs and the rules represented by FRAND have enabled a development of fast technology creation and contributed to the rapid diffusion in ICT goods and ICT-based services. The SEP system has also allowed for new competition, both between existing technologies and brands, and from new ones that have stepped into the market with the ambition to disrupt it, again to the benefit of the consumer. It is difficult to imagine that the ICT and digital development would have been as fast as it has been if SEPs had not been a central feature of the market.

The changing fortunes of companies operating in the cellular and smartphone market would not have been possible if there had not been an SEP system that supported competition. Now that the world economy is on the doorstep of new innovations that are dependent on a great number of input technologies – e.g. the Internet-of-Things, transport connectivity and intelligent vehicles – it is crucially important for the consumer that a balanced and functioning SEP system is maintained and that actors in the system converge towards it – which would ultimately meet their economic interests.

#### Growth solves nuclear war.

Henricksen 17, \*Thomas H., emeritus senior fellow at the Hoover Institution; (March 23rd, 2017, “Post-American World Order,” Hoover Institution, <http://www.hoover.org/research/post-american-world-order>)

What Is To Be Done?

The first marching order is to dodge any kind of perpetual war of the sort that George Orwell outlined in  “1984,” which engulfed the three super states of Eastasia, Eurasia, and Oceania, and made possible the totalitarian Big Brother regime. A long-running Cold War-type confrontation would almost certainly take another form than the one that ran from 1945 until the downfall of the Soviet Union.

What prescriptions can be offered in the face of the escalating competition among the three global powers? First, by staying militarily and economically strong, the United States will have the resources to deter its peers’ hawkish behavior that might otherwise trigger a major conflict. Judging by the history of the Cold War, the coming strategic chess match with Russia and China will prove tense and demanding—since all the countries boast nuclear arms and long-range ballistic missiles. Next, the United States should widen and sustain willing coalitions of partners, something at which America excels, and at which China and Russia fail conspicuously.

There can be little room for error in fraught crises among nuclear-weaponized and hostile powers. Short- and long-term standoffs are likely, as they were during the Cold War. Thus, the playbook, in part, involves a waiting game in which each power looks to its rivals to suffer grievous internal problems which could entail a collapse, as happened to the Soviet Union.

Some Chinese and Russian experts predict grave domestic problems for each other. They also entertain similar thoughts about the United States, which they view as terminally decadent and catastrophically polarized over politics, ethnicity, and the future direction of the country. So, the brewing three-way struggle also involves a systemic contest, which will test the competitors’ economic and political institutions.

At this juncture, the world is entering a standoff among the three great and several not-so-great powers. Averting war, while defending our interests, will prove a challenge, calling for deft policy, political endurance, and economic growth, as well as sufficient military force to keep at bay aggressive states or prevail over them if ever a war breaks out.

#### Absence of domestic 5G competition cedes leadership in technical standards to China.

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There is little doubt today that American superiority in the next generation of mobile communications, commonly called 5G, is a matter of extraordinary national concern. There is also little doubt that China is a strong competitor, already having outspent the United States by [$24 billion](https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-5g-deployment-imperative.pdf#page=3) and planning [$411 billion](https://www.scmp.com/tech/china-tech/article/2098948/china-plans-28-trillion-yuan-capital-expenditure-create-worlds) in 5G investment over the next decade. The Chinese government has also laid out multiple national plans for establishing the country as a leader in mobile technology, and the Chinese firm Huawei is poised to be the [top smartphone manufacturer](https://www.cnbc.com/2018/11/16/huawei-aims-to-overtake-samsung-as-no-1-smartphone-player-by-2020.html) by 2020.

And what are United States companies doing about this? Bickering over patents.

For years, the leading American supplier of advanced mobile communications chips has been the San Diego-based Qualcomm. The company has been an innovator of mobile technology, but it has also been a remarkable innovator of convoluted legal strategies. As an ongoing Federal Trade Commission [lawsuit alleges](https://www.ftc.gov/news-events/press-releases/2017/01/ftc-charges-qualcomm-monopolizing-key-semiconductor-device-used), Qualcomm has used its dominant position as a chip supplier and its extensive patent holdings to weave an intricate web of patent licensing across the mobile industry. The effect of that complex licensing scheme, the FTC claims, has been to force competitor chipmakers out of the market and to extract concessions and high patent royalties from smartphone and mobile-device makers.

Qualcomm today faces only one major U.S. competitor—Intel, whose chips Apple recently [started using](https://www.cultofmac.com/484250/intel-reaping-rewards-apples-scrap-qualcomm/) instead of Qualcomm’s. Not surprisingly, Qualcomm has leveraged its patents to force a retaliatory investigation against Apple, the effect of which could be, as an administrative judge [recently determined](http://www.fosspatents.com/2018/10/itc-judge-didnt-buy-testimony-for-which.html), to boot Intel out of the mobile-chip market and leave Qualcomm as a monopoly.

It is hard to imagine that this infighting among Apple, Intel and Qualcomm is getting the United States very far in 5G, and it is harder to imagine that Qualcomm’s desired outcome would do so, either. The best path, instead, is the obvious one: allowing competition and expanding the number of firms working on 5G.

Competition encourages companies to out-innovate each other in order to grab market share. Of particular importance to 5G, competition leads to [better cybersecurity](https://morningconsult.com/opinions/in-the-race-to-5g-monopoly-considered-harmful/) in products, making them less vulnerable to hacking or misuse.

Competition is especially crucial when it comes to the technical standards that define how 5G works. These standards are the work of 3GPP, an international consortium of technology companies in the field. Chinese players such as Huawei and ZTE are major participants in 3GPP. Ensuring that 3GPP’s standards reflect American values requires having as many American companies at the negotiating table as possible—which is harder to achieve when those companies are trying to sue each other out of business.

Certainly patents themselves, as rewards for new inventions, are a driver of innovation in areas such as 5G. The problem, though, is not the existence of a patent system but the ever-expanding power of the patent laws, which encourage companies to pour dollars into complex patent licensing and assertion schemes—as companies like Qualcomm have done—rather than to perform the hard work of building new technologies. When innovation in patent strategy is more profitable than actual innovation, we lose the race to 5G and other technologies.

But don’t take my word for it. [Multiple members of Congress](https://www.patentprogress.org/2019/01/11/congress-weighs-in-on-qualcomm-and-apple-at-the-itc/), from both sides of the aisle, have denounced the use of patents to kick companies like Intel out of 5G development, predicting that such actions would “dampen the quality, innovation, competitive pricing, and in this case the preservation of a strong U.S. presence in the development of 5G and thus the national security of the United States.”

Or look to what China itself is doing. The Chinese government is handing out rewards left and right to encourage technology research and development. Indeed, it grants subsidies and financial benefits (ranging from the [ordinary](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2818503) to the [imperfect](https://funginstitute.berkeley.edu/wp-content/uploads/2013/12/patent_subsidy_Zhen.pdf) to the [bizarre](https://www.scmp.com/news/china/article/1681850/how-get-out-jail-early-china-buy-inventors-idea-and-patent-it)) to encourage its citizens to file for patents. But while China specifically encourages filing for patents, it does little to encourage using them: Patent infringement awards in court are peanuts—often only [five figures](https://scholarship.law.berkeley.edu/btlj/vol33/iss2/2/)—and most Chinese patent owners drop their patents [within five years](https://www.bloomberg.com/news/articles/2018-09-26/china-claims-more-patents-than-any-country-most-are-worthless) of getting them. The message in China is clear: You will be rewarded for innovating, but not for quibbling over patents.

The United States should take the same tack if it wants to match China in 5G. Ever-stronger patent rights encourage counterproductive disputes that are a drag on industry, a drag on research and development, and ultimately a drag on domestic competitiveness on the global stage. If America wants to lead in 5G, then it must clear the path for strong competition among leading American technology companies.

#### Standards leadership allows China to export digital authoritarianism.

Drew et al. 21, \*Dr Alexi Drew, Research Associate, The Policy Institute, King’s College London; (May 7th, 2021, “The Critical Geopolitics of Standards Setting”, https://www.transatlantic-dialogue-on-china.rusi.org/article/the-critical-geopolitics-of-standards-setting)

However, this previously ‘western’ domain is challenged by a Chinese bloc of private industry actors with centrally directed, strategic motivations for their efforts who have managed to leverage the flaws of this system for political and economic advantage.  The market-driven self-regulation model of technical standards has proven itself unsustainable given the geopolitical power achievable through the control of these standards. The marketised approach is easily abusable by a technologically developed nation-state with geopolitical intentions firmly in mind.

Obscurity Through Complexity

Technical standards have the immediate appearance of being both apolitical and ethically neutral. This seems to set them apart from the debate over standards of state behaviour in [cyber space concerning espionage and actions below the threshold of armed conflict](https://www.cfr.org/blog/unexpectedly-all-un-countries-agreed-cybersecurity-report-so-what). Yet, technological standards are unequivocally connected to normative practices of international behaviour and ethics. The extremely complex nature of the standards under consideration in bodies such as the International Organization for Standardization, the International Electrotechnical Commission (IEC), the International Telecommunications Union (ITU), and the Third Generation Partnership Project (3GPP) obscures the very tangible real-world impact that the standards they set have. The 3GPP is responsible for standards setting for mobile telecommunications. It covers everything from 5G through to autonomous vehicles and the Internet of Things. These are the bodies defining how the modern world is constructed.

On the one hand they appear quite benign, responsible for such banalities as the use of Universal Serial Bus (USB) connectors versus proprietary standards. This hardly seems a matter of national security importance. But the same process is responsible for what ultimately shape the basic operating parameters of facial recognition technology in closed circuit television systems, the level of centralised state control at the technical foundations of the internet, and the protections of personally identifiable data. These generate profound implications for international policy and ethics.

Internal Competition vs Strategic Direction

Technical standards setting processes have, historically, been dominated by private sector actors who have had both the capacity to develop a particular technology to the point of holding a significant market share, and the ability to use that market share to advocate for the standardisation of the technology in line with their own production. The market led approach has continued to be the prevailing model by which American companies have globalised the technical standards behind US dominated technological innovation. This privatised form of self-regulation for technology companies is only partially influenced by the approach taken within the EU where [some licensing of standards are controlled by state or EU led institutions.](https://www.ui.se/globalassets/ui.se-eng/publications/ui-publications/2019/ui-brief-no.-2-2019.pdf)

In contrast to this approach the Chinese model has involved a high level of state-oriented direction, oversight, and direct engagement on the creation and signing off technical standards. Efforts to harmonise and centralise technical standards domestically have become increasingly internationalised as the CCP takes this centralised, strategic approach to technical standards setting bodies such as the ITU, 3GPP, and IEC. Technical standards have also become an increasingly central component of the Digital Silk Road with the openly expressed goal of increasing uptake of Chinese technical standards in partner countries.

The implications of this clash between a system of technical standardisation that is driven by the market versus one driven by an authoritarian government subsidised model are a direct challenge to the development of free, open, and ethical technology. Standardisation mechanisms have become political, or rather there has been a gradual realisation of the political power to be gained from the control of technical standards. While the PRC might have come to this awareness first, the US and Europe have since had a rude awakening about the missed opportunity. The privatised model of technical standards setting favoured by European and US markets relies upon the dynamics of financial competition to regulate behaviour. This is in stark contrast to the statist Chinese model.

#### Causes global backsliding.

Kendall-Taylor et. al 20 \*Andrea Kendall-Taylor, senior fellow and director of the Transatlantic Security Program at the Center for a New American Security, co-author of Democracies and Authoritarian Regimes; Erica Frantz is Assistant Professor of Political Science at Michigan State University; Joseph Wright is Professor of Political Science at Pennsylvania State University; (March/April 2020, “The Digital Dictators,” Foreign Affairs, <https://www.foreignaffairs.com/articles/china/2020-02-06/digital-dictators>)

The risk that technology will usher in a wave of authoritarianism is all the more concerning because our own empirical research has indicated that beyond buttressing autocracies, digital tools are associated with an increased risk of democratic backsliding in fragile democracies. New technologies are particularly dangerous for weak democracies because many of these digital tools are dual use: technology can enhance government efficiency and provide the capacity to address challenges such as crime and terrorism, but no matter the intentions with which governments initially acquire such technology, they can also use these tools to muzzle and restrict the activities of their opponents.

#### Democracy solves a litany of existential threats.

Diamond 19, Professor of Political Science and Sociology at Stanford University, Senior Fellow at the Hoover Institution, Senior Fellow at the Freeman Spogli Institute for International Studies, PhD in Sociology from Stanford University, (Dr. Larry, Ill Winds: Saving Democracy from Russian Rage, Chinese Ambition, and American Complacency, p. 199-202)

The most obvious response to the ill winds blowing from the world’s autocracies is to help the winds of freedom blowing in the other direction. The democracies of the West cannot save themselves if they do not stand with democrats around the world. This is truer now than ever, for several reasons. We live in a globalized world, one in which models, trends, and ideas cascade across borders. Any wind of change may gather quickly and blow with gale force. People everywhere form ideas about how to govern—or simply about which forms of government and sources of power may be irresistible—based on what they see happening elsewhere. We are now immersed in a fierce global contest of ideas, information, and norms. In the digital age, that contest is moving at lightning speed, shaping how people think about their political systems and the way the world runs. As doubts about and threats to democracy are mounting in the West, this is not a contest that the democracies can afford to lose. Globalization, with its flows of trade and information, raises the stakes for us in another way. Authoritarian and badly governed regimes increasingly pose a direct threat to popular sovereignty and the rule of law in our own democracies. Covert flows of money and influence are subverting and corrupting our democratic processes and institutions. They will not stop just because Americans and others pretend that we have no stake in the future of freedom in the world. If we want to defend the core principles of self-government, transparency, and accountability in our own democracies, we have no choice but to promote them globally. It is not enough to say that dictatorship is bad and that democracy, however flawed, is still better. Popular enthusiasm for a lesser evil cannot be sustained indefinitely. People need the inspiration of a positive vision. Democracy must demonstrate that it is a just and fair political system that advances humane values and the common good. To make our republics more perfect, established democracies must not only adopt reforms to more fully include and empower their own citizens. They must also support people, groups, and institutions struggling to achieve democratic values elsewhere. The best way to counter Russian rage and Chinese ambition is to show that Moscow and Beijing are on the wrong side of history; that people everywhere yearn to be free; and that they can make freedom work to achieve a more just, sustainable, and prosperous society. In our networked age, both idealism and the harder imperatives of global power and security argue for more democracy, not less. For one thing, if we do not worry about the quality of governance in lower-income countries, we will face more and more troubled and failing states. Famine and genocide are the curse of authoritarian states, not democratic ones. Outright state collapse is the ultimate, bitter fruit of tyranny. When countries like Syria, Libya, and Afghanistan descend into civil war; when poor states in Africa cannot generate jobs and improve their citizens’ lives due to rule by corrupt and callous strongmen; when Central American societies are held hostage by brutal gangs and kleptocratic rulers, people flee—and wash up on the shores of the democracies. Europe and the United States cannot withstand the rising pressures of immigration unless they work to support better, more stable and accountable government in troubled countries. The world has simply grown too small, too flat, and too fast to wall off rotten states and pretend they are on some other planet. Hard security interests are at stake. As even the Trump administration’s 2017 National Security Strategy makes clear, the main threats to U.S. national security all stem from authoritarianism, whether in the form of tyrannies from Russia and China to Iran and North Korea or in the guise of antidemocratic terrorist movements such as ISIS.1 By supporting the development of democracy around the world, we can deny these authoritarian adversaries the geopolitical running room they seek. Just as Russia, China, and Iran are trying to undermine democracies to bend other countries to their will, so too can we contain these autocrats’ ambitions by helping other countries build effective, resilient democracies that can withstand the dictators’ malevolence. Of course, democratically elected governments with open societies will not support the American line on every issue. But no free society wants to mortgage its future to another country. The American national interest would best be secured by a pluralistic world of free countries—one in which autocrats can no longer use corruption and coercion to gobble up resources, alliances, and territory. If you look back over our history to see who has posed a threat to the United States and our allies, it has always been authoritarian regimes and empires. As political scientists have long noted, no two democracies have ever gone to war with each other—ever. It is not the democracies of the world that are supporting international terrorism, proliferating weapons of mass destruction, or threatening the territory of their neighbors.

#### 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.

#### Climate change is anthropogenic and causes extinction---5G-enabled smart cities are critical for mitigation and adaptation.

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Currently, the entire planet is at risk due to continual climate change [1–3]. The recorded increase in average temperature across the world in the past hundred years, and the associated changes attributed to this, are known as global warming. Many scientists are convinced by the published evidence that this change is anthropogenic and resulted from the elevated emission levels of global greenhouse gases (GHGs) [4,5]. Gases such as water vapor, carbon dioxide, methane, nitrous oxide, and ozone are responsible for the absorption and emission of thermal radiation. These changes in the relative quantities of the GHGs induce a proportional change in the amount of preserved solar energy. Presently, the accepted indicator for global warming is the sustained rise in the mean temperature worldwide. This definition is designed to account for the fact that there may be some localized exceptions to this rise. For example, there may be cooling experienced in a region while the global temperature may increase altogether, hence the need for average temperature. A key concern with the GHGs trapping of more heat in the atmosphere is that it affects both climate and short scale weather patterns. Consequently, it results in greater numbers of adverse weather events such as storms, heat waves, cold snaps, droughts, and fires [6]. Climate-related risks to health, livelihoods, food security, water supply, human safety, and economic growth are projected to increase with global warming of 1.5 ◦C [7] and further increase further at 2 ◦C, as shown in Figure 1. In addition, the risks to global aggregated economic growth due to the climate change impacts are projected to be lower at 1.5 ◦C than at 2 ◦C by the end of this century.

Carbon dioxide has the most substantial effect on global warming [8]. Although it was once assumed to have an ~100 year lifespan in the atmosphere, careful studies revealed that the situation is far worse, with three-quarters of the gas expected to remain for a time in the region of up to ~1000 years, with the remainder lasting for an indefinite period of time [9]. It was indicated that the present impacts of humanity on the atmosphere can certainly cause a long term problem [10]. Carbon dioxide is released when oil, coal, and other fossil fuels are burnt for the energy we use to power our homes, cars, and smartphones. By lessening its usage, we can curb our own contribution to climate change while saving money. The first challenge is eliminating the burning of coal, oil, and, eventually, natural gas. Oil is the lubricant of the global economy as it is hidden inside such ubiquitous items as plastic and corn, fundamental to the transportation of both consumers and goods. Coal is the substrate, supplying roughly half of the electricity worldwide, a percentage that is likely to grow according to the International Energy Agency (IEA). In fact, buildings contribute up to 43% of all the greenhouse gas emissions worldwide [11], even though investing in thicker insulation and other cost-effective as well as temperature-regulating strategies can save money in the long run. Investment in new infrastructures, or radical upgradation of the existing highways and transmission lines, may help to reduce greenhouse gas emissions, yielding economic growth in the developing countries.

Nations across the globe have kept very high targets to reducing their GHG discharges [12,13]. In order to meet these goals, considerable reductions in city energy usage is required. At a global scale, urban communities represent over half (55%) of the population, which is predicted to reach 68% by the middle of this century [14]. Urban areas claim ownership of the highest levels of energy use, gas emission, and also the largest local economy. As such, it is crucial for urban areas to reduce their consumption and utilize renewable sources wherever available to reduce their gas discharge levels. Smart cities often utilize digital sensors to measure and transmit data about the levels of GHGs in the city at that moment, as a means of tackling them [15]. The efficacy of such a system is thus reliant on the network used to collate and analyze the data collected as an extant network. The mobile telecommunications networks offer a convenient solution to this desire, as their pre-existence has the clear benefit of reducing costs compared to the design and implementation of a novel system. It is recognized that smart cities will certainly act as the key players meeting these ambitious targets [16,17]. In this study, we focused primarily on the potential applications of 5G network technology to control climate change in Singapore. In addition, a clear overview of the sustainability benefits of introducing 5G technology compatible smart cities, buildings, and farms in all aspects of urbanization is provided. Herein, the main purpose is to tackle the negative outcomes associated with anthropogenic climate change, with a particular focus on the contributions that are best made by the telecoms network operators.

Climate change is one of the most challenging problems that humanity has ever faced. Presently, hundreds of millions of lives, innumerable species, entire ecosystems, health, economy, and the future habitability of this planet are at risk. Fortunately, climate change is solvable, we just need to wisely exploit the existing technologies and sciences. Climate change mitigation is a pressing international need in which many management actions are required. The development of 5G technology has been largely driven by smart mobile devices and advanced communication technologies. It may thus serve as a technical enabler for a whole new range of business opportunities, energy, and facilities management, together with industrial applications. Moreover, it may enable different devices to work together seamlessly. Definitely, the 5G cellular network technology is expected to revolutionize the global industries with profound effects on the savings of energy, waste generation and recycling, and water resources management, thus reducing the climate change impacts.

### 1AC---Cybersecurity ADV

#### Advantage 2 is Cybersecurity:

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

Duan 20, \*Charles Duan is a senior fellow and associate director of tech & innovation policy at the R Street Institute, where he focuses his research on intellectual property issues; (2020, “OF MONOPOLIES AND MONOCULTURES: THE INTERSECTION OF PATENTS AND NATIONAL SECURITY”, Santa Clara High Technology Law Journal, 36(4), 369-405. Retrieved from <https://www2.lib.ku.edu/login?url=https://www.proquest.com/scholarly-journals/monopolies-monocultures-intersection-patents/docview/2442966690/se-2?accountid=14556>)

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.

#### Insecure technical standards cause inevitable systemic grid collapse---extinction.

DeNardis 21, \*Dr. Laura DeNardis, PhD in Science and Technology Studies from Virginia Tech, Dean of the School of Communication at American University, and Gordon M. Goldstein, Adjunct Senior Fellow at the Council on Foreign Relations, (March 1st, 2021, “The Real Lesson of the Texas Power Debacle”, Lawfare, 3/1/2021, https://www.lawfareblog.com/real-lesson-texas-power-debacle)

The infrastructure was essential, ubiquitous and providing basic functionality for everything in daily life from water to heat and transportation. And in an instant it was gone, plunging tens of thousands of residents into a life-threatening crisis. This is, of course, the narrative of the recent debacle in Texas, where a winter storm overwhelmed the state’s electrical grid and brought the state to a near-total blackout. But it should also be interpreted as a preemptive warning of what Americans will face from the next generation of the internet and the new realm of cybersecurity risk it will dramatically amplify.

Both forms of infrastructure—a state-run electrical grid and the 5G and “internet of things” future to which we are rapidly hurtling—share three attributes. First, their construction reflects a lack of imagination about the danger that can quickly coalesce when seemingly remote threat scenarios become real. Second, compounding a lack of analytic imagination is an absence of preparedness. Third, for both the Texas electrical grid and the emerging internet, public policy protections are either meager or completely absent.

In planning for the resilience of its electrical grid, public officials in Texas discounted the potentially devastating disruption that could occur from unpredictable events—whether related to climate change or just a once-a-century anomaly. They also eschewed precautions other states take seriously by allowing for the interconnection of electrical grid supply chains across their borders, ostensibly because of their ideological rejection of federal regulatory oversight governing such arrangements.

As the United States builds out a new national 5G cyber-physical communications network through private service providers, Americans similarly discount the risks—myriad in their diversity and severity—that are orders of magnitude more significant than what Texas confronted recently. More physical things than people are already connected. The super empowered internet of tomorrow, known among some in the field as the “internet of everything,” will exceed by tens of billions of devices the number of connections between individuals simply communicating via social media or digital screens.

This confronts policymakers with an imminent threat: A cyber outage is no longer about losing digital communications but about losing basic societal functioning and even human life. The failure of imagination is to think of the SolarWinds attack on U.S. federal agencies and tech companies as a worst-case scenario. The failure of imagination is to think of cybersecurity through a content-centric lens rather than as possible attacks on the material world. The emergence of internet-connected cardiac devices, digitally dependent cars, and internet-connected agriculture systems portend the stakes of a cyberattack to health care, economic and social functioning, and food security.

The United States should be prepared for, and certainly not be caught by surprise by, such cyberattacks. Yet, the internet of everything is notoriously insecure. Internet-connected physical objects are not necessarily upgradeable. Nor do they come with adequate default security and encryption. The 5G infrastructure that helps connect digital objects has been at the center of debates over Chinese espionage. Industrial cyber-physical systems are based on technical standards that have not been collaboratively vetted for security and interoperability. One of the most infamous cyberattacks—the so-called Mirai botnet that took down major media sites and corporations—hijacked these insecure objects in homes to carry out the assault. The United States is not yet prepared.

Finally, in the race to conceive and deploy effective public policy responses, the U.S. government as a whole is hardly more anticipatory or synthesized in its response to potential calamity than the state of Texas. The focus of U.S. cyber policy remains on information policy issues such as disinformation, manipulation and violent speech rather than securing the digital world that now powers our material day-to-day lives. The Biden administration confronts an enormous challenge in crafting a comprehensive strategy to the cybersecurity risks foreshadowed by the ruinous experience in Texas and its management of vital infrastructure. While the digital world has leapt from two-dimensional to three-dimensional space, cyber policy has not at all jumped from 2D to 3D.

This failure of imagination, preparedness and policy protection must not be America’s cyber future; the stakes are far too high and the costs are far too great. The Texas disaster is a potent illustration of what has always been true: Our digital society and economy are extremely vulnerable and grow more porous and subject to penetration day by day. As digital sensors and cyber control systems become further embedded in physical infrastructure like energy systems, agriculture and transportation, there is no longer a separation between security of the “real” world and security of the online world. They are entangled and increasingly enmeshed—and policy has yet to catch up to either envisioning or mitigating the looming threats the U.S. confronts.

If the energy grid cannot weather a winter storm, how can it be expected to withstand a major cyberattack? What other vital forms of national infrastructure—ranging from water, bridges, highways and roads, and ultimately our day-to-day financial system—are comparably at risk? As Texas dramatizes, it is neither hyperbolic nor exaggerated to assert that our survival could now depend on securing the inevitable cyber-physical future that is accelerating with stunning rapidity.

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

Wintch 21, \*Timothy M. Wintch, an active-duty Major in the United States Air Force. He is currently a graduate student at the Oettinger School of Science & Technology Intelligence, National Intelligence University, in Bethesda, Maryland. Mr. Wintch has over 11 years of experience in command-and-control operations as an Air Battle Manager. He holds a Bachelor of Arts in Politics from the University of California, Santa Cruz, and a Master of Arts in Military Studies from American Military University. (April 20th, 2021, “PERSPECTIVE: Cyber and Physical Threats to the U.S. Power Grid and Keeping the Lights on”, 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/)

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.

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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.

### 1AC---Solvency

#### 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.

#### The plan requires SSO’s to administer reasonable action to prohibit ex post opportunism---that strengthens FRAND effectiveness while enabling SEP holders to capture appropriate royalties---which is the best competition-innovation balance.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf)

3. Application of the Basic Legal Principles

The antitrust principle is straightforward: industry-wide collaboration through SSOs to establish procompetitive standards is permitted only if it is no more restrictive of competition than reasonably necessary to enable creation of the standards. When standard setting predictably creates technology monopolies that, if unrestrained, will enable anticompetitive ex post opportunism that would otherwise not occur, an SSO that does not take effective measures to prevent or minimize such ex post opportunism engages in conduct that is more restrictive of competition than necessary. In that case, the SSO and, in appropriate cases, its members, may well violate Section 1 of the Sherman Act.

Under this principle, SSO procedures and FRAND rules should be evaluated based on whether they lead to reasonable SEP royalties, using the competitive ex ante licensing standard discussed above, which has been adopted by the courts in patent law. Put differently, FRAND rules should be evaluated based on their ability to prevent SEP holders from obtaining more than the ex ante value of their technology from implementers.

This limitation would not prevent a SEP holder from proﬁting, perhaps greatly, from participating in the SSO and having its patented technology included in the standard. The SEP holder continues to be rewarded for its technology because the inclusion of its technology in the standard can still greatly increase the volume of licensing opportunities available to the SEP holder.

Whether a particular set of FRAND rules are sufficiently effective in preventing ex post opportunism will depend on the particular circumstances. The procedural unfolding of the case will also depend upon the circumstances. As a general matter, the case would probably be structured as an ordinary Rule of Reason case.82

First, the plaintiff would have to demonstrate harm to competition as a result of the collaboration of the SSO’s members, many of which compete with one another. In this case, the harm to competition would stem from the ability of the SEP holder to exercise monopoly power by obtaining royalties in excess of the competitive, ex ante level. The decision to include patented technologies in the standard would be the allegedly unlawful agreement. Notably, the court need not determine what a FRAND royalty is; it would suffice to determine that market power has been created or exercised, and that existing SSO rules and policies were not adequate to prevent the competitive harm. The defendant, which could be the SSO or perhaps one or more SSO members, would win at this point if the plaintiff failed to show harm to competition. If might fail if the standard faces substantial competition and the court concludes that the SEP holder therefore does not have market power or if the SSO’s rules and policies are found to be effective in preventing ex post opportunism, even if the plaintiff or even the court thinks that other rules and policies would be preferable.

Second, if the plaintiff makes the requisite showing of harm to competition, the defendant(s) would then have to show some procompetitive justiﬁcation— in this case, the beneﬁts of the standard. These two initial steps should be straightforward.

Third, if as is likely the defendant is able to show a procompetitive justiﬁcation, the plaintiff would have to show that the SSO could have used available, reasonable alternatives to realize the efficiency beneﬁts with less or none of the competitive harms. The plaintiff might identify reasonable alternatives that would have led to a different standard, based on including unpatented technology in the standard or perhaps involving fewer SEPs or fewer owners of SEPs, which would be less subject to patent holdup. More likely, the plaintiff could suggest alternative SSO rules that would not change the standard, but would reduce the likelihood or extent of ex post opportunism. For example, the plaintiff might suggest more rigorous FRAND-type rules, such as rules that set forth more precise principles on which FRAND royalties are to be determined and the circumstances under which SEP holders might seek injunctions.

Fourth, the burden would then shift to the defendant(s) to show that the beneﬁts of the standard could not have been realized if the SSO had adopted any of the proffered alternatives or that those alternatives were unrealistic.83 The plaintiff would be entitled to judgment if the court concludes that those beneﬁts could have been realized with less competitive harm if the SSO had adopted the standard with different IPR rules or policies.

Our overall sense, based on experience and the empirical literature, is that the extant FRAND rules are generally useful, but tend to be inadequate because they are imprecise and leave unresolved such critical issues as (a) the meaning of a reasonable royalty, even conceptually; (b) the meaning of “non-discriminatory;” (c) to whom licenses must be offered; and (d) under what circumstances may a SEP holder obtain an injunction.84 These imprecise FRAND commitments are therefore not sufficient to adequately prevent ex post opportunism. The recent revisions to IEEE’s FRAND policy represent a signiﬁcant step in the right direction, but even this advance leaves important questions unanswered.85 If FRAND rules are inadequate in these ways, litigation involving extant FRAND rules would likely be resolved only at the ﬁnal, fourth step. The defendant would be able to demonstrate the beneﬁts created by the standard; the plaintiff would be able to demonstrate the creation of market power and that other reasonable and practical rules or policies would ameliorate the problem. The case would thus turn on whether the defendant is able to demonstrate that signiﬁcant beneﬁts associated with standardization could not have been realized if the SSO had adopted those other rules or policies.

The court would have available a variety of possible remedies if the plaintiff prevails. Implementers that paid supracompetitive royalties or were unlawfully excluded in whole or in part from product markets as a result of the inadequate FRAND policies would be entitled to damages and, in some cases, to treble damages.86 If the unlawful SSO conduct is regarded as the collective action of the SSO and its members, which is likely to be the case in most instances, SSO members would be jointly and severally liable for the damages. Forward-looking injunctive relief aimed at restoring competition would need to be fashioned to the requirements of the individual case. For example, a court could order the SSO to adopt a new rule or policy proposed by the plaintiff. If the court is reluctant to take on that governance role, it might give the SSO a period of time—maybe ninety days—to develop a rule, subject to the court’s ultimate approval, which would adequately ameliorate the competitive problem created by the SSO. Alternatively or in addition, the court might order the parties to attempt to negotiate a rule or policy on which they can agree. And, depending on the circumstances, the court might order SEP holders, including at least those that were defendants in the case, to comply with the new SSO rules and policies.

#### Alleviating patent holdup begins by permitting consumer challenges to SSO misconduct, which necessitates antitrust. SSO’s cannot be counted on to self execute FRAND.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, <https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf>)

2. Why Antitrust Enforcement Is Necessary

Some SSO members have an interest in ensuring that the SSO takes steps to minimize the potential harms from the SEP holders’ monopoly power, and this undoubtedly explains in part why most SSOs have adopted FRAND policies or similar requirements. But, as shown in the economic model in the Appendix,73 SSOs cannot in general be counted on to adopt effective FRAND policies. The bases for this conclusion, which is central to our argument for the applicability of Section 1 to SSO FRAND rules, can be summarized as follows.74

First, the SSO members collectively have an interest in permitting SEP holders to charge supracompetitive royalties that elevate the downstream price of compliant devices to the monopoly level. Doing so will enable the members in aggregate to collect increased revenues from consumers, and thus to generate increased profits that in theory could be shared by all the members. In other words, supracompetitive royalties can enrich industry participants as a group at the expense of final consumers. This fact alone should serve as a clear and strong signal regarding the dangers of counting on SSOs to implement effective FRAND policies: if the SSO members negotiate efficiently, the outcome will be just as bad for consumers as if the members agreed to fix downstream prices.75 The fundamental problem is that final consumers are not at the table when the SSO rules are negotiated.

Second, SSO members that own SEPs but earn little or no profits as implementers have a powerful self-interest in being able to exercise the ex post monopoly power associated with their SEPs. Because SSO policies are usually determined by a consensus process, these members will likely be able to block the adoption of fully effective FRAND policies. Moreover, these SSO members often have the greatest interest in SSO patent policies. Since much of their income may be attributable to patent licensing, they can be expected to devote substantial resources to block the adoption of FRAND policies that effectively prevent patent holdup.

Third, even SSO members that earn significant profits as implementers may have mixed incentives if they also own SEPs, which can also lead to weak or in-effective FRAND rules. In the Appendix, we show that, if the requisite share of votes in the SSO are cast by firms whose share of SEP royalties is at least as large as their share of downstream profits, and if these firms can coordinate their voting over the FRAND rules, then an SSO unconstrained by antitrust laws will establish FRAND rules leading to an outcome no better for consumers than would result from an integrated monopolist controlling all SEPs and all downstream sales.76

Fourth, even SSO members that are downstream implementers and own few, if any, SEPs may have only a modest interest in promoting effective policies to restrict ex post opportunism. Because all implementers will be subject to the opportunism, all of them will face increased licensing costs, and therefore will likely be able to pass on most or all of the increased costs to their customers.77 Furthermore, these implementers might not be especially active or effective in the standard-setting process for free-riding or public-good reasons, especially if SEP royalties constitute only a relatively small portion of the costs of their standard-implementing products. Public choice theory predicts that the highly motivated SEP holders are likely to have the greatest influence over patent policies.

Empirical evidence bears out these concerns. As a starting point, we find it striking that SSO FRAND rules are almost always quite vague.78 Notably, SSOs in which SEP holders are more prevalent tend to have weaker FRAND rules.79 Further, to our knowledge, SSOs have made almost no effort to enforce their FRAND rules and have, instead, left enforcement efforts to others.80 This evidence raises serious doubts about the effectiveness of the existing FRAND rules in preventing ex post opportunism.

The problem is exacerbated by the fact that most SSOs put IPR rules in place long ago, when SEP-holder opportunism was much less of a problem. Proponents of new, stricter IPR rules to prevent SEP-holder opportunism thus face the daunting task of persuading an SSO that makes decisions by consensus to change an existing policy over the often-intense opposition of SEP holders. The dispute over the recent changes to the IPR rules at the Institute of Electrical and Electronics Engineers (IEEE) illustrates how difficult and contentious that process can be.81

Thus, effective prevention of ex post opportunism by SEP holders requires antitrust enforcement to overcome the SSO problems associated with (a) attenuated incentives (implementers that also own SEPs); (b) the public good aspect of stronger FRAND rules (the danger that implementers will free ride on others rather than expend resources to implement strong FRAND rules); and (c) externalities (the harm to consumers that results when implementers pass through higher royalties in the form of higher prices).

#### Indicting systemic holdup is a fruitless academic exercise. Be cautious of neg studies---they rely on deeply flawed methodologies, don’t address relevant hypotheses, and in all likelihood are funded by Qualcomm.

Shapiro & Lemley 20, \*Carl Shapiro is the Transamerica Professor of Business Strategy Emeritus at the Haas School of Business, University of California at Berkeley; \*Lemley is the William H. Neukom Professor at Stanford Law School and a partner at Durie Tangri LLP; (2020, “THE ROLE OF ANTITRUST IN PREVENTING PATENT HOLDUP”, https://faculty.haas.berkeley.edu/shapiro/patentholdup.pdf)

C. Actual Patent Holdups Are Very Difficult to Measure

As with holdup in general, quantifying the frequency and magnitude of actual patent holdups is very difficult as a practical matter and not a useful way of assessing the importance of the patent holdup problem. Rarely can researchers observe the ex post price, because patent licensing terms are normally confidential. Even when researchers can observe the license fees, they are often embedded in a complex agreement. And even in those rare cases where researchers can accurately observe the ex post price, they are unlikely to observe the ex ante price, making it difficult if not impossible to measure the magnitude of the holdup.

Litigated cases also are problematic as a source of data to quantify the magnitude of actual patent holdups. A litigated case resulting in an award of reasonable royalties may well involve attempted holdup, but by definition it cannot provide smoking-gun evidence of actual holdup, at least if one accepts that the royalties awarded by the court are reasonable.64 Rather, at least since the Supreme Court eliminated the automatic entitlement to an injunction, litigation to judgment (which is rare) often reflects a refusal to give in to holdup by a defendant willing to take its chances in court. And the vast majority of patent cases settle. The terms of a settlement are rarely observable, so it is impossible to know whether those settlements reflected the value of holdup.

Notwithstanding these points, a number of authors have pointed to a lack of empirical evidence to argue that patent holdup either does not exist or is not a significant problem.65 Even taken on their own terms, many of these papers are deeply flawed. One such paper, which has often been cited by those who downplay the importance of patent holdup, purports to offer empirical evidence inconsistent with the hypothesis that SEP holdup has slowed innovation or harmed consumers.66 The conclusion to this Qualcomm-funded paper states, “[w]e cannot reject the hypothesis of no SEP holdup.”67 How do these authors reach this conclusion? They compare rates of change of quality-adjusted prices in “SEP- reliant” industries with “similar” non-SEP-reliant industries, primarily over the 1997-2013 period.68 For example, they show that quality-adjusted prices of cellular phones have fallen faster than the quality-adjusted prices of automobiles.69 This exercise does not address the relevant hypothesis: whether SEP holdup increased the price of cellular phones from what it otherwise would have been.70 The quality- adjusted prices of pharmaceuticals have risen much faster than automobiles over the same period of time, but that similarly is not proof that pharmaceuticals are subject to a patent holdup problem.

Beyond the obvious and fatal flaws in this empirical work,71 the whole line of inquiry is of limited relevance for the purpose of measuring the social costs of holdup or designing institutions to limit patent holdup, because it only looks for instances of actual patent holdup. As explained above, these instances are very difficult to detect and are only the tip of the iceberg in terms of the social costs of patent holdup.72 So far as we can tell, the vast majority of these papers have been funded by Qualcomm and other patent holders seeking to weaken the institutions designed to control patent holdup, increase their leverage in licensing negotiations, and thus increase their ability to monetize their patents.73

Despite the difficulties of observing the incidence and magnitude of actual patent holdups, we are able to observe the telltale signs of actual patent holdup. Transaction cost economics, and simple bargaining theory for that matter, tell us that actual patent holdup can be expected to occur when three conditions are present: (1) a firm has developed a new product independently; (2) that firm has made significant investments that are specific to one or more patents asserted against that product; and (3) the firm is not protected from patent holdup.74 As discussed above, conditions (1) and (2) are common in the high-tech sector, placing considerable weight on the institutions that protect firms from patent holdup.

The presence of those institutions is itself evidence that the patent holdup problem is real and significant. As we noted in Part I, companies try to structure their transactions to avoid holdup, developing institutions for that purpose. As we have seen, the traditional market solutions do not work well for patents. In most industries, the central mechanisms limiting patent holdup come from patent law, namely the rules governing injunctions and patent damages. In the high-tech sector, companies have overwhelmingly turned to SSOs in an effort to obtain global commitments to an ex ante royalty, which appear in the form of FRAND commitments. The near-universal recognition in the industry of the need for such a mechanism is strong evidence that companies view holdup as a problem they must build institutions to avoid.

# 2AC

## Advantage---Economy

### AT: K Of Democracy

#### Capitalist democracy is the ultimate economic system for strengthening autonomy and freedom from oppression---impact turns the K and their case argument.

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Capitalist markets and freedom

Freedom is the ultimate appeal of capitalism. The early proponents of capitalism, such as Adam Smith , as well as more recent defenders, including economists from such diverse political motivations as Milton Friedman and Amartya Sen, have all defended capitalism on this ground. While efficiency and the ability to raise living standards is an important reason to maintain free markets, and an aspect of the freedom that Sen extols, the freedoms provided by capitalism are intrinsically valuable and partially constitutive of freedom. As Sen argues, regardless of the efficiencies of the market, “the more immediate case for the freedom of market transaction lies in the basic importance of that freedom itself.” 97 While securing this freedom is straight- forward and simple for middle and upper class men of the First World, for women and others oppressed by traditional norms of their cultures, the freedom to transact in the marketplace can be liberating on a far wider scale. Thus, I will argue as well that capitalism enhances women’s freedom.

The free market system of capitalism enhances freedom in three ways. Traditionally freedom of exchange has been seen as a basic form of individual freedom, with which it would be wrong to interfere, and in this sense is a basic, negative freedom like the freedom of speech, assembly, the press, or conscience. Gerald Gaus, a liberal defender of the morality of markets, summarizes the liberal case for freedom in capitalism: “classical liberalism embraces market relations because (but not, of course, only because) they (1) are essentially free, (2) respect the actual choices of individuals, and (3) legitimately express different individuals’ rational decisions about the proper choice between competing ends, goods, and values.” 98 Market freedom is necessary to respect individuals as free choosers and designers of their own “experiments in living,” as Mill famously puts it. 99 Free markets also have positive aspects, however, in providing opportunities by increasing persons’ material wealth in order to choose things that they value. Another aspect of the positive freedom that markets promote is the freedom of persons to develop their autonomy as decision makers, and to find opportunities to escape from oppressive traditional roles. Markets also promote a third, more controversial, sense of freedom in that they allow persons to interact in mutually beneficial ways even when they do not know each other or have any other traditional reason to care about the other. I call this sense of freedom “social freedom.” In each of these ways – negative, positive, and social – markets have much, and in some cases even more, to offer to women, as women have been more confined by traditional roles to a con- strained family life, deprived of a fair distribution of benefits and burdens of family life, and treated as second-class citizens in their communities. While capitalism has already, as we have seen, brought great advances in the realm of negative and positive liberties, capitalism’s ability to destruct the old and create new forms of community offer a vision of freedom that is yet to be fulfilled. In what follows I will explore each of the three senses of freedom to see how capitalism is related to its realization.

Negative freedom is the freedom not to be interfered with, and a list of such freedoms typically includes civil and political freedoms, but also the economic freedoms to engage in market transactions and to use or benefit from one’s legitimately owned property. These latter two – the freedom to exchange and the freedom to use or benefit from one’s property – are two of the hallmarks of capitalism as I have defined it in terms of the private ownership of capital, free wage labor, and free market conditions. I also added the freedom from discrimination constraint, which is another aspect of negative freedom. Capitalist systems, whether any of the forms discussed at the beginning of my contribution or the enlightened form that I defend, do place some constraints on trade. Taxation by government to provide public goods that the market does not efficiently provide or to internalize negative externalities that traders would otherwise ignore to the detriment of bystanders places legitimate constraints on trade. So, too, do reasonable restrictions on trade designed to certify the quality of some goods. But capitalism by definition defends the basic freedom to open or close a business, to contract one’s labor with the highest bidder, and to exchange goods without attend- ing to the social status of the trading partners. Negative freedoms for the serf, the bonded laborer, or the slave would be freedom to leave the master – to not be impeded, whether by custom or law – to freely engage in wage labor. The nondiscrimination constraint also comprises this freedom; it is the freedom not to be constrained by features about one that are fixed at birth and that have nothing to do with one’s talents or abilities.

As Sen explains, there are four ways in which free markets are needed now to uphold negative freedom or, put another way, to resist tyranny and enslavement. 100 First, they allow persons to escape the bonds of traditional labor bondage by being able to seek wage employment away from traditional bosses. In many rural areas people farm land for traditional landowners, and markets for labor allow them to escape this bondage. This is the freedom capitalism offers that Marx recognized as an improvement over feudalism, where serfs had no choice in their place or way of life. Second, the communism of Eastern Europe and the former Soviet Union, and still existing in North Korea and Cuba, denied the freedoms to engage in exchange or choose where one lives. That these freedoms are now less abridged makes it no less important to recognize that they are important negative freedoms that capitalism upholds. Third, free markets help to liberate children from bonded labor. Children in parts of South Asia are particularly susceptible to being placed in bondage to higher caste men, who put them to work making carpets or bricks for a very small pittance paid to their parents. The main reason for child labor is parental poverty. Where parents can earn more by their labor, they send their children to school. Even if the parents are still too poor or shortsighted or lack schools, if the children can earn wages by their labor, then they can do better than they do in bondage, where they have no income and no ability to resist harsh, violent treatment. Fourth, market employment for women is crucially important for their economic independence and for getting a better deal in intra-household distributions.

Outside employment gives women opportunities that are not directly tied to their menfolk. It makes them able to bargain for a better share of the family wealth and income, but also for less of the burden of chores, or enables them to pay others to do some of the work. The opportunity to work in the same kinds of jobs as men eventually wears away gender distinctions, or makes those distinctions less confining and more equal in terms of status. In this way, enlarging women’s negative freedom also tends toward enlarging their positive freedom.

Positive freedom is defined in two different ways: either as simply the positive supports that individual persons need in order to live a life with enough good choices to deserve the name freedom, or as also including the internal qualities of character that allow persons to be autonomous or self-lawmakers. The two are connected in that persons are typically unable to develop their capacities to plan their lives or live according to principles if they do not have enough to eat, or they have to worry about their physical health and security, or if they have not had an adequate education. Positive freedom in the sense of autonomy recognizes that completely unconstrained behavior is not necessarily action motivated by desires that are one’s own. And positive freedom in the sense of social supports recognizes that without the wherewithal (material and psychological) to act on one’s own desires, there can be no freedom. Sen refers to these as the process and opportunity aspects of freedom. 101 In this book I do not take a stand on which is the proper sense of positive freedom; both are clearly desirable as described. Instead, I argue that both senses of positive freedom are supported in capitalism, though not necessarily guaranteed. In the first sense, capitalism supports, but does not guarantee, the ability of persons to secure their own livelihood and material well-being. As we have seen, capitalism has increased life expectancy, improved health, and decreased fertility and child mortality on average. Increasing wealth is also correlated with increasing educational levels, and decreased fertility is correlated specifically with increasing female education. 102 Capitalism, as a highly cooperative and social form of production, requires socially coordinated and regulated efforts. Thus, capitalism is clearly a form of social provision in design as well as in outcome. Capitalism does not guarantee that any given individual will develop or exercise autonomy, but rather supplies external supports for autonomy by offering opportunities to plan and to raise one’s level of material well-being. In particular, capitalism does not guarantee that persons will develop autonomous desires, and in some ways may be seen as encouraging nonautonomous or what Kant would have called heteronomous desires, a point I will return to in section 6.

The most important objection against capitalism, however, is that it enables gross inequalities in wealth and income. When these inequalities also entail absolute impoverishment, so that persons do not have the ability to choose between decent ways of life, then this is clearly a failure. But capitalism raises the overall level of material wealth in a society, and so allows for the possibility of addressing such abject poverty. The fact that market interactions lead to inequalities is not, in itself, a denial of freedom. But it does pose the possibility of inequalities in power that can lead to positive and social unfreedoms, and indeed this is borne out in the actual world in many ways. Perhaps the worst sort is where wealth buys political influence in a nominally democratic country.

Before leaving the topic of inequality, however, it is important to point out that capitalism is not alone in supporting gross inequalities, but the way in which it does so is acceptable where it is not in other systems. North Korea, a socialist totalitarian system, creates gross inequalities of wealth through political power that controls resources. The leader and his minions live in vast wealth while much of the population teeters on the brink of famine. The communist systems of the Soviet Union and China were also notorious for the vast consumption and indulgence of their leaders compared with the average citizen, and notoriously one had to be a party member in the Soviet Union in order to own a car. Traditional societies are no better; the patriarchs of many such societies are rich while the young and the less powerful labor for far less. But in each of these cases the wealth comes not through productive effort, but rather through political control, and in some cases through inheritance. While the leader of North Korea is in charge simply by virtue of being the son of the previous leader, the richest capitalists in the world were not born to the previous generation of the wealthiest. It is true that Bill Gates and Warren Buffet were born to upper-middle-class families, but their vast wealth was earned through innovation, skills, and talents, and not through inheritance. This is not to say that inequality in wealth is not a problem, nor to say that opportunities to achieve great wealth are fairly distributed in capitalism. They are not, and that is a serious moral issue. But it is to say that socialist and traditional societies have at least equally difficult problems to address in terms of inequality in wealth and power . In the final section of my contribution, I will argue that an enlightened capitalism must do better to address inequalities that either amount to absolute poverty or cause political and social inequalities that deny free- dom. It is also important to note, however, that inequality that does not rule out good options for life does not seriously interfere with individual positive freedom, in either sense of the term. One need not live in the best of all possible worlds, after all, in order to be free enough to pursue one’s own projects.

Positive freedom as autonomy requires that one is not manipulated by the social structure under which one lives. One’s desires must be one’s own and one’s beliefs must be rationally generated for one’s actions to be entirely autonomous. Isaiah Berlin , who draws the distinction between negative and positive freedom in this latter way, ultimately rejects the idea of positive freedom because, he argues, to posit a breach of positive freedom one would have to impose desires on individuals that they do not acknowledge. 103 For governments to attempt to guarantee positive freedom, then, they would have to posit a good for their citizens and entice them to seek it, that is, in Rousseau’s famous phrase, to force their citizens to be free. Berlin, as a liberal, argues that freedom requires merely imposing no impediments to individuals’ given preferences. Positive freedom, Berlin concludes, insinuates a totalitarian menace.

Although Berlin’s is a commonly cited libertarian line of argument that is often aligned with defenders of capitalism, I want to argue that Berlin’s distinction between positive and negative freedom is drawn incorrectly, and that positive freedom in the sense of autonomy is not hostile to capitalism. It is especially important for women and other oppressed groups to attend to internal, psychological impediments to freedom that are generated by social constraints on what they can do and be. Negative and positive freedom cannot be easily separated for two reasons. First, a persistent lack of negative freedom for a social group harms the individuals of that group psychologically, causing them to lack positive freedom. Second, even though the idea that a government might posit an individual’s good for her raises the specter of totalitarianism, that fact does not vitiate the claim that an individual’s freedom can be compromised by a lack of vision of viable alternative options. A person can lack freedom with- out there being a clear way for the person to attain freedom in the future. Violations of negative freedom turn out to result in deeper harms that slide over into the kinds of harms that violations of positive freedom entail.

This is particularly the case for victims of oppression, and particularly for women. 104 Women are often convinced by many different social norms, expectations, and incentives to live within constraints that similarly placed (in terms of race, class, culture, and time period) men need not consider. This sort of internally constrained vision, whether it is because of false consciousness , shame, stereotype, or trauma, is the kind of violation of their positive freedom that should most concern feminists. Capitalism, by providing an option outside kin and traditional community norms for independence and social power, can allow women the wherewithal to escape these constraints. Even if a particular woman does not choose to work outside the home or compete in the marketplace as an entrepreneur, the fact that women have this option under capitalism increases the freedom of all women. Enlarging the set of things that women are seen as cap- able of can reduce the sense that women have that they are inferior, and this can increase their confidence in a wider set of social circumstances. It puts the lie to the idea that women are incapable, and helps women to stand up to ill-treatment and violence.

While many philosophers recognize negative and positive freedoms in quite similar ways, a third concept of freedom has been proposed by different philosophers in quite different ways. Quentin Skinner’s third concept of liberty is the lack of an ongoing threat to one’s freedom of thought and expression. 105 Skinner argues that this requires the existence of a noncoercive government or absence of a threat of domination by one. This form, however, is reducible to negative freedom from interference by government, insofar as it refers to legitimate forms of coercion. A legitimate government may legitimately apply coercive measures to assure the good of the whole or the protection of others who have a rightful claim to such protection, provided that the measures are, in Thomas Scanlon’s terms, something that no reason- able person could reject. Skinner clearly does not mean to rule that out, but rather to rule out coercion that is wrongful. Yet this is already covered under the concept of negative freedom; one is not free in the negative sense if one is coercively dominated by one’s government. However, it goes too far to suggest that one is not free if one is threatened by domination of a coercive government. In this sense Skinner’s third concept of freedom is similar to Philip Pettit’s view of freedom as nondomination. Both are mistaken to take the (implied) ability to pose a threat to be the same thing as a coercive threat.

If freedom in this third sense is compromised by even the threat of coercion or domination, then the free market is not free in this sense. But both Skinner and Pettit claim too much for a concept of freedom. As Gaus argues, it fails to distinguish between power to and power over. 106 Wealth gives one the power to afford many trades, but it does not give one the ability to exercise power over another by forcing a person to make a trade she or he does not want, and thereby limit that person’s liberty. While the classical liberal claims that market transactions are free as long as there is no force, fraud, or coercive threat, Pettit denies this with an argument that freedom requires nondomination, and one dominates another if one has the ability to exercise power over another (including by means of financial clout, technical advantage, or political power). To avoid domination, he argues, one has to have anti-power. Rule of law gives anti-power. Gaus argues that Pettit’s view is profoundly anti-market because the market will inevitably lead to unequal wealth and income, and this would always involves domination on Pettit’s understand- ing, since greater success would allow one to potentially exercise power over another. Thus, the market is full of relations of domination – everyone except Bill Gates is dominated, after all, on this analysis. Furthermore, since equals have equal ability to attack each other, if we all had equal power to achieve our ends, we would all be unfree. Such an analysis trivializes the concept of domination. If Skinner or Pettit are understood to sim- ply mean that freedom requires that there is no active threat or active domination, then this requirement can be seen as entailed already by negative freedom, since an active threat or domination is a direct constraint of one’s basic civil, political, and property rights. If Skinner or Pettit are taken to mean that there can be no potential threat, however, then their concept of freedom falls prey to this triviality objection. And insofar as these concepts are positive, that is, perhaps requiring social supports for individuals to be able to fully participate in social cooperation, they are reducible to positive freedom.

Berlin discussed and rejected a third sense of freedom that he finds in the claims of colonial oppressed persons, and which emerged in the writings of philosophers writing about colonial oppression, such as Jean-Paul Sartre and Frantz Fanon . Freeing oneself from oppression requires negative freedoms in the form of freedom of protest, and positive freedom. In progressive hands, “negative freedom is the capacity to destabilize identities and interrupt norms.” 107 This form of freedom, defended as well in Cynthia Willett’s Irony in the Age of Empire , is the desire for sociality and belonging within one’s group, and recognition of one’s social group and its distinctive values and norms from out- siders. She calls this third form of freedom, “solidarity.” Willett’s third freedom as solidarity requires something more than those two concepts, though. In particular, it requires the existence of social bonds that tie the individuals beyond their ability to resist and set themselves free. I want to resist the notion that this is a form of freedom, regardless of how good social bonds might feel. For they are the very forces of unfreedom in many cases. Bonds of solidarity both enable and constrain. The first, enabling, is indeed freedom, but the second, constraint, is not; it is the dark, exclusionary side of solidarity. Willett does not embrace any particular terms on which social solidarity might be forged. Cornel West’s appeal to nuclear family norms as form of third freedom raises her suspicions. She writes, “West’s appeal to the virtues of sacrifice may not subjugate women to patriarchal control, but it doesn’t sound like the battle cry for liberation that we might desire.” 108 But her suspicions here raise for me the question of why, then, she would align social bonds with freedom. If concepts of freedom proceed from sources of anxiety, I cannot think of anything that produces more anxiety than the requirement that I follow the norms of some particular community, without any opportunity to opt out of that community.

In my view we want freedom to pursue or reject social bonds – not to be dominated or threatened with constraints by others who would prevent our ability to pursue or imagine them. This is most important for members of social groups that have been oppressed for generations, as women have been. Such persons have a constrained vision of what is possible for them, and need to be able to see beyond these constraints that have been erected by others, but reinforced internally. Nonetheless, a third form of freedom can emerge under the right circumstances, namely the social conditions which allow and support individual autonomy for each person, which I call “social freedom.” Social freedom transcends positive freedom by considering the needs of each, not just of individuals one at a time. Autonomy requires an absence of oppressive social constraints that prevent free self- development. Systematic violence, economic discrimination and segregation, social shaming, and vicious stereotyping are among the most autonomy-defeating forces. Social freedom poses a collective obligation to provide for the education of the next generation, not because they are “our children,” as if we own them or they are our personal, genetic or property-inheriting legacy, but because children are at that stage where they need to be taught to develop their capacities if they are to be autonomous adults. Mill argued for this on the utilitarian grounds that more and higher quality pleasure is created that way. 109 Other moral and political theories can generate this obligation as well. For example, a contractarian can argue that by educating children in this way we provide more and better opportunities for cooperation for mutual advantage. A Kantian can simply argue that it is the only way to treat children as ends in themselves. Social freedom can be described as the Rawlsian union of social unions , which he argues arises in the society that is structured by his two principles of justice, and involves each taking pleasure in the achievements, the flourishing, of others. I take it that this is true of the society of free persons, which is not only free of cur- rent oppressions, but whose members seek to free all persons from oppression. For in such a society the individuals are able to seek their own good with good will toward others as well. They seek to encourage diversity and enhance the freedom of others. They take pleasure in and identify with the accomplishments of others. And further, they come to see their own freedom as connected to that of the others.

Capitalism supports social freedom, but, as with positive freedom, does not guarantee it. That would be too much to ask of an economic system alone. As I have argued elsewhere, capitalism embraces the positive aspects of competition. 110 Competition in capitalism is valuable because it allows many different persons to succeed at least in part. For businesses to be profitable there must be consumers to buy their products, and for there to be consumers to buy products, there must be a large sector of the population that earns enough through their labor to consume, and a significant number who can invest and create new opportunities for work. Capitalism thrives where the situation is more like what game theorists call a cooperative competition; that is, the players of the game have interests that are partly shared and partly opposed. The optimal and equilibrium outcome arises when each pursues a strategy that both maximizes their outcome, but also leads to the others being better off, as WE1 suggests. This contrasts sharply with the situation of either the zero-sum game, where there is only one winner and all the others are losers, or worse, a game in which, when each of the players pursues their own best strategies, a socially suboptimal outcome arises (such as in the Prisoner’s Dilemma).

This optimism about capitalism and its role in raising the sights of women is as applicable in poor, developing countries as it is in rich, First World ones. As Sen has argued, freedom is both constitutive of development seen in a progressive light, but also instrumental toward that form of development. Development as he understands it requires making human lives better on a variety of levels that he calls “capabilities.” Included among these capabilities are the abilities that I have listed as the interests of persons, and as the requirements of autonomy. Not only are negative and positive freedoms constitutive of development, though. Social freedom arises from the development of these freedoms as well. Capitalism is not the only route to development, but development seems, empirically, not to be complete without opening up markets to relatively free trade. Sen illustrates this by pointing to the development in China , which moved to a market-oriented economy in 1991. 111 While pre-reform China pursued basic education and health care for all, it lacked democratic freedoms, and this meant less responsiveness to famine and social crises. China suffered an enormous famine, in which 30 million people died, during the Great Leap Forward of 1958–61. Sen credits democracy with preventing any famine in India since independence in 1947. The development of capitalist markets has raised the overall level of income in China , however, to the point where it is unlikely to suffer another such catastrophe, despite the lack of democracy .

## Advantage---Cyber

### 2AC---LT---Cybersecuritization

#### That’s an example of ‘riskification’---responding to the underlying conditions that enable cyberattacks is productively securitizing and solves their links.

Friis et al. 16, \*Karsten Friis and Erik Reichborn-Kjennerud, Norwegian Institute of International Affairs (NUPI) (“From Cyber Threats to Cyber Risks”, Conflict in Cyber Space: Theoretical, Strategic and Legal Perspectives, Karsten Friis and   
Jens Ringsmose eds., London: Routledge, 2016)

A shared starting point is the constructivist epistemology position on dangers. According to Corry, nothing is inherently a threat or a risk as 'different dangers can be constructed in terms of either risk or threat at different times' (Corry 2012, 246). To understand the difference between threat security policies and risk security policies, one can therefore not define the former as graver or more dangerous than the latter. Rather, Corry argues that risk security can be distinguished from threat security by three features:

First, it implies a different kind of causality. Risk makes us think of the 'constitutive causes of harm', rather than the direct causes of harm (as in threats) (Corry 2012). Riskification relates to the factors that make a danger possible, such as vulnerability of societies, weak international regimes and the existence of weapons. In contrast, the threat and securitization of for instance terror is 'connected to particular agents believed to exist and have malicious intent and capability to commit acts of terror' (Corry 2012). This is a more direct causation of harm than a risk, and produces a different logic for action. Furthermore, Corry argues, '(t)hinking in terms of constitutive causes draws attention to background factors and structures (material or discursive) that make certain actions or events possible' (Corry 2012). The focus on constitutive background factors thus opens for the inclusion of material factors – such as malware – into the analysis.

Second, there is a change of locus of security action: 'whereas securitization involves a plan of action to defend a valued referent object against a threat, riskification implies a plan of action to govern the conditions of possibility of harm' (Corry 2012, 247). Threats cannot be governed, only defended against. The attention is therefore outward, while a risk policy looks inward. 'Security thus has to take on modus operandi other than defence' (Corry 2014). It is not about deterrence, defence or fighting, but about understanding dependencies and vulnerabilities, precaution and governance. It is about reducing the chances of possible future harm through preventive policies, resilience and international governance.

Third, while securitization calls for immediate and short-term responses through extraordinary measures, riskification promotes long-term thinking, investment in governance capabilities, investment in precautionary measures and resilience. In contrast to securitization, it may open debates and increase transparency in the discourse on security (Corry 2012, 248).

To sum up, riskification is not characterised by an existential threat to a valued referent object leading to exceptional measures against external and ungovernable threatening others. Rather, it posits risks (understood as condition of possibly harm) to a referent object. This thus leads to programmes for permanent changes aimed at reducing vulnerability and boosting governance-capacity of the valued reference object itself' (Corry 2012).

Riskification of Cyber

Armed forces worldwide are generally constrained to protecting their own information and communications technology (ICT) systems. Main responsibility for securing cyberspace, on the other hand, lies with civilian and commercial agencies. This means that cyber security is mostly dealt with on a day-to-day basis by cyber security professionals in civilian and commercial organisations rather than military 'cyber warriors'. In contrast to securitization theory, riskification may be a relevant tool for the analysis of these less dramatic responses and the everyday production of cyber security. This includes preparations to sustain larger attacks, while keeping the door open for escalation and securitization under particular circumstances. By applying Corry's three characteristics of riskification (constitutive causality, governance, and long-term), in the following we will see how this applies to cyber security.

## AT: K

### 2AC---Framework

#### 2---use consequentialism---evaluating causal outcomes is most ethical. “You link, you lose” diverts political responsibility for atrocity.

Zanotti 17, \*Laura Zanotti, Associate Professor Department of Political Science, Virginia Tech, (January 13th, 2017, “Reorienting IR: Ontological Entanglement, Agency, and Ethics,” International Studies Review)

Furthermore, if we accept Barad’s position that we are “of the world” and not above the world, theorizing looks more like a practice endowed with performative political effects than a quest for the discovery of the “true nature” of what exists. Therefore, intellectual undertakings are a form of political agency and come with great responsibility. Such responsibility requires the need for exercising prudence in making truth statements about what is universally good or naturally inevitable. Assumptions about linearity of causal relations, universal laws of history, or ontological properties of entities yield two problematic effects. On the one hand, they may stifle political imagination; on the other hand, they could encourage actions based upon abstract prescriptions rather than upon careful diagnosis of the forces that obtain in the situation at hand. In an entangled world, there are no externalities. Arguments that divert responsibility by basing political choices upon abstract principles or aspirations and, as a result, that treat what happens on the ground as “unintended consequences” or “collateral damage,” are ethically thin and politically dangerous.

In fact, unintended consequences may well be the result of irresponsible political decision-making that does not include a competent assessment of the practical configurations that constitute the context of action and the means necessary to achieve stated goals. Such attitudes, Amoureux and Steele (2014) have suggested, have led to disastrous initiatives, such as the Bush administration’s invasion of Iraq. Likewise, Kennedy (2006) has shown that the bland rhetoric of jus in bello that provides standardized criteria regarding the number of acceptable civilian casualties (conveniently called collateral damage) produces the effect of diverting responsibility from those who conduct war while assuaging their consciences concerning the injuries and deaths their choices are inflicting. Kennedy (2004) has also shown that as a result of the preference for universal normativity, the human rights profession (which he calls “the invisible college”) is more concerned with protecting abstract norms than with acting politically so as to devise viable solutions to specific problems.

Universal norms and bureaucratic routines play a major role in prescribing and justifying UN peacekeeping interventions. As Jean Marie Guehe ́nno argued more than a decade ago, strategies of international intervention based upon assumptions of causal linearity and invariance may amount to hubris. Norms and rules can also offer grounds for appeasement. The massacres that occurred in Rwanda and Srebrenica in the 1990s provide examples of how, by uncritically following institutionalized rules, United Nations peacekeepers permitted atrocities. UN employees are not cold-blooded monsters or extremely callous individuals. They follow norms and rules, key examples of which include the principle of “impartiality,” Security Council mandates, and “rules of engagement.” By doing so, however, they have often fallen short of considering the possible consequences of decisions in specific situations. The United Nations’ failure to take action to prevent the Rwanda and Srebrenica genocide testifies to the fact that following universal norms (i.e., the imperative to preserve impartiality) and bureaucratic reasoning (i.e., the rules of engagement prescribing not to intervene to disarm any party of the conflict) set the stage for avoiding a careful assessment of what was at stake on the eve of the massacres. These ways of reasoning also appeased consciences for not making decisions accountable to the people in danger (Zanotti 2014).

#### That’s especially true contextual to their K---problem-oriented approaches to gender violence are necessary. Rational, cost-benefit analysis centric politics are necessary and not *determined by* gender, even if they’re informed by them.

McNay 14 -- Professor of Political Theory at Oxford University and Fellow of Somerville College, (Lois, *The Misguided Search for the Political*, 2014, p. 214-215)

What other features might a radical democratic theory possess that takes seriously the critique of social suffering? It may be more fruitful to adopt an approach that, at least in the first instance, is problem- rather than model-oriented. Radical democrats might do better to develop principles from an initial focus on specific issues of social inequality, rather than embark at the outset on a quest to distil the essence of the political and from this derive models into which all concrete struggles are subsequently shoehorned. Of course, any problem-oriented approach will unavoidably be 'influenced' by theoretical presuppositions, but it won't necessarily be as ‘driven’ by the rigid logic of the model that seems to flow from a one-sided focus on political ontology (see Shapiro 2007). It is, after all, a problem-oriented approach that has informed many other types of radical theorizing, such as feminism, and has made them suspicious of the formal abstractions of theory that disregard the distinctiveness of certain group experiences (e.g. Martineau and Squires 2012). Partly because of its established links with activism, feminist theorizing has more often than not been propelled, in the first instance, by particular problems relating to gender inequality and the marginalized experiences of women. Feminist political theorizing about justice, for instance, starts with the problem of the gendered division of labour, and the undervaluing of women's care work. It uses this sociological perspective to expose the conceptual deficiencies of asocial individualism as a device for deriving principles of justice because of the way it obscures human vulnerability and dependency and thereby fails to recognize care as a fundamental element of social justice (Bubeck 1995; Fraser 1997; Kittay 1999). Others feminists think through issues of democratic participation starting from the problem of the underrepresentation of women in [END PAGE 214] established democratic structures, their effective political invisibility, which is a consequence of their vulnerable position as workers in transnational production processes (e.g. Fraser 2008; Phillips 1991).

The hope is that a problem-oriented approach to radical democratic theorizing is less likely to result in the marginalization of the actual and disregard of distinctive group experiences than are approaches oriented to the issue of ontology. The difficulty with the latter approaches is that the strategy of temporarily bracketing off social relations in order to capture the essence of the political turns into a theoretical inability to reintroduce excluded issues of power without violating the pristine foundational logic that they claim to have identified. Consxequently, the logic of political ontology is given an unwarranted primacy that effectively occludes the autonomy and specificity of social relations and practices. Differently put, in so far as it lacks a sense of mediation, this political anti-essentialism becomes an essentialism. Thus, Mouffe is unable to address substantive issues about power that have a direct bearing on her model of democratic agonism because of a misplaced fear of falling into an essentialism that would violate her rigid linguistic constructivism. Arendtian ideas of political action as creative inauguration are famously empty, proscribing many issues of subordination and oppression by relegating them to the realm of social necessity and, therefore, privacy. Although his ontology of abundance is more materialist in nature, Connolly finds it hard to incorporate types of social experience or practice that do not conform to his notions of creative becoming and dynamic assemblages. In all these cases, social being is treated in a tokenistic and cipher-like fashion as simply yet another empirical exemplification of foundational dynamics of indeterminacy. Although it is not abstraction per se that causes socially weightless thinking, it may be that radical democratic theory may be better placed to think about oppression by deploying abstractions that are, at least in the first instance, sociological rather than philosophical in nature. The aim of grounding political theory in sociological reconstruction rather than ontological construction would be to, in Charles W. Mills’s words, 'reflect the specificities of group experience, thereby potentially generating categories and principles that illuminate rather than obfuscate the reality of different kinds of subordination' (2005: 173; also Honneth 2012: 46-8).

### 2AC---Util

#### Weigh impacts using expected value, or magnitude times probability---it’s the only to ethically account for the underappreciated risk of high-magnitude threats.

Harris 17, \*John Harris is Politico’s editor-in-chief and author of The Survivor: Bill Clinton in the White House; \*Bryan Bender is Politico’s national security editor and author of You Are Not Forgotten. Both Harris and Bender covered the Pentagon during the tenure of Secretary of Defense William J. Perry; (January 6th, 2017, “Bill Perry Is Terrified. Why Aren’t You?”, https://www.politico.com/magazine/story/2017/01/william-perry-nuclear-weapons-proliferation-214604/)

And there’s one other difference from the Cold War: Americans no longer think about the threat every day.

Nuclear war isn’t the subtext of popular movies, or novels; disarmament has fallen far from the top of the policy priority list. The largest upcoming generation, the millennials, were raised in a time when the problem felt largely solved, and it’s easy for them to imagine it’s still quietly fading into history. The problem is, it’s no longer fading. “Today, the danger of some sort of a nuclear catastrophe is greater than it was during the Cold War,” Perry said in an interview in his Stanford office, “and most people are blissfully unaware of this danger.”

It is a turn of events that has an old man newly obsessed with a question: Why isn’t everyone as terrified as he is?

Perry’s hypothesis for the disconnect is that much of the population, especially that rising portion with no clear memories of the first Cold War, is suffering from a deficit of comprehension. Even a single nuclear explosion in a major city would represent an abrupt and possibly irreversible turn in modern life, upending the global economy, forcing every open society to suspend traditional liberties and remake itself into a security state. “The political, economic and social consequences are beyond what people understand,” Perry says. And yet many people place this scenario in roughly the same category as the meteor strike that supposedly wiped out the dinosaurs—frightening, to be sure, but something of an abstraction.

So Perry regards his last great contribution of a 65-year career as a crusade to stimulate the public imagination—to share the vivid details of his own nightmares. He is doing so in a recent memoir, in a busy public speaking schedule, in half-empty hearing rooms on Capitol Hill, and increasingly with an online presence aimed especially at young people. He has enlisted the help of his 28-year-old granddaughter to figure out how to engage a new generation, including [through a series of virtual lectures](https://lagunita.stanford.edu/courses/course-v1:Engineering+NuclearBrink+Fall2016/about) known as a MOOC, or massive open online course. He is eagerly signing up for “Ask Me Anything” chats on Reddit, in which some people still confuse him with William “The Refrigerator” Perry of NFL fame. He posts his ruminations on YouTube, where they give Katy Perry no run for her money, even as the most popular are closing in on 100,000 views. One of the nightmare scenarios Perry invokes most often is designed to roust policymakers who live and work in the nation’s capital. The terrorists would need enriched uranium. Due to the elaborate and highly industrial nature of production, hard to conceal from surveillance, fissile material is still hard to come by—but, alas, far from impossible. Once it is procured, with help from conspirators in a poorly secured overseas commercial power centrifuge facility, the rest of the plot as Perry imagines it is no great technological or logistical feat. The mechanics of building a crude nuclear device are easily within the reach of well-educated and well-funded militants. The crate would arrive at Dulles International Airport, disguised as agricultural freight. The truck bomb that detonates on Pennsylvania Avenue between the White House and Capitol instantly kills the president, vice president, House speaker, and 80,000 others. Where exactly is your office? Your house? And then, as Perry spins it forward, how credible would you find the warnings, soon delivered to news networks, that five more bombs are set to explode in unnamed U.S. cities, once a week for the next month, unless all U.S. military personnel overseas are withdrawn immediately? If this particular scenario does not resonate with you, Perry can easily rattle off a long roster of others—a regional war that escalates into a nuclear exchange, a miscalculation between Moscow and Washington, a computer glitch at the exact wrong moment. They are all ilks of the same theme—the dimly understood threat that the science of the 20th century is set to collide with the destructive passions of the 21st. “We’re going back to the kind of dangers we had during the Cold War,” Perry said. “I really thought in 1990, 1991, 1992, that we left those behind us. We’re starting to re-invent them. We and the Russians and others don’t understand that what we’re doing is re-creating those dangers—or maybe they don’t remember the dangers. For younger people, they didn’t live through those dangers. But when you live through a Cuban Missile Crisis up close and you live through a false alarm up close, you do understand how dangerous it is, and you believe you should do everything you could possibly do to [avoid] going back.” For people who follow the national security priesthood, the dire scenarios are all the more alarming for who is delivering them. Through his long years in government Perry invariably impressed colleagues as the calmest person in the room, relentlessly rational, such that people who did not know him well—his love of music and literature and travel—regarded his as a purely analytical mind, emotion subordinated to logic and duty. Starting in the 1950s as a technology executive and entrepreneur in some of the most secretive precincts of the defense industry, he gradually took on a series of high-level government assignments that gave him one of the most quietly influential careers of the Cold War and its aftermath. Fifteen years before serving as Bill Clinton’s secretary of defense, Perry was the Pentagon official in charge of weapons research during the Carter administration. It was from this perch that he may have had his most far-reaching impact, and left him in some circles as a legendary figure. He used his office to give an essential push to two ideas that transformed warfare over the next generation decisively to American advantage. One idea was stealth technology, which allowed U.S. warplanes to fly over enemy territory undetected. The other was precision-guided munitions, which allowed U.S. bombs to land with near-perfect accuracy. During the Clinton years, Perry so prized his privacy that he initially turned down the job of Defense secretary—changing his mind only after Clinton and Al Gore pleaded with him that the news media scrutiny wouldn’t be so bad. The reputation he built over a life in the public sphere is starkly at odds with this latest highly impassioned chapter of Perry’s career. Harold Brown, who also is 89, first recruited Perry into government, and was Perry’s boss while serving as Defense secretary in the Carter years. “No one would have thought of Bill Perry as a crusader,” he says. “But he is on a crusade.” Lee Perry, his wife of nearly 70 years, is living in an elder care facility, her once buoyant presence now lost to dementia. Perry himself, lucid as ever, has seen his physical frame become frail and stooped. Rather than slowing his schedule, he has accelerated his travels to plead with people to awaken to the danger. A trip to Washington includes a dinner with national security reporters and testimony on Capitol Hill. Back home in California, he’s at the Google campus to prod engineers to contemplate that their world may not last long enough for their dreams of technology riches to come true. He’s created an advocacy group, [the William J. Perry project](http://www.wjperryproject.org/), devoted to public education about nuclear weapons. He’s enlisted both his granddaughter and his 64-year-old daughter, Robin Perry, in the cause. But if his profile is rising, his style is essentially unchanged. He is a man known for self-effacement, trying to shape an era known for relentless self-promotion, a voice of quiet precision in a time of devil-take-the-hindmost bombast. The rational approach to problem-solving that propelled his career and won him adherents and friends in both political parties and even among some of America’s erstwhile enemies remains his guide—in this case, by endeavoring to calculate the possibilities and probabilities of a terrorist attack, regional nuclear war, or horrible miscalculation with Russia. “I want to be very clear,” he said. “I do not think it is a probability this year or next year or anytime in the foreseeable future. But the consequence is so great, we have to take it seriously. And there are things to greatly lower those possibilities that we’re simply not doing.” \*\*\* Perry really did not expect he would have to write this chapter of his public life. His official career closed with what seemed then an unambiguous sense of mission accomplished. By the time he arrived in the Pentagon’s top job in 1994, the Cold War was over, and the main item on the nuclear agenda seemed to be cleaning up no-longer-needed arsenals. As defense secretary, Perry stood with his Russian counterpart, Pavel Grachev, as they jointly blew up missile silos in the former Soviet Union and tilled sunflower seeds in the dirt. “I finally thought by the end of the ‘80s we lived through this horrible experience and it’s behind us,” Perry said. “When I was secretary, I fully believed it was behind us.” After leaving the Pentagon, he accepted an assignment from Clinton to negotiate an end to North Korea’s nuclear development program—and seemed agonizingly close to a breakthrough as the last days of the president’s term expired. Now, he sees his grandchildren inheriting a planet possibly more dangerous than it was during his public career. No one could doubt that the Sept. 11 terrorists would have gladly used nuclear bombs instead of airplanes if they had had them, and it seems only a matter of time until they try. Instead of a retreating threat in North Korea, that fanatical regime now possesses as many as eight nuclear bombs, and is just one member of a growing nuclear club. Far from a new partnership with Russia, Vladimir Putin has given old antagonisms a malevolent new face. American policymakers talk of spending up to $1 trillion to modernize the nuclear arsenal. And now comes Donald Trump with a long trail of statements effectively shrugging his shoulders about a world newly bristling with bombs and people with reasons to use them. Perry knew Hillary Clinton well professionally, and says he admired both her and Bill Clinton for their professional judgment though he was never a personal intimate of either. He was prescient before the election in expressing skepticism about how voters would respond to the dynastic premise of the Clinton campaign—a healthy democracy should grow new voices—but was as surprised as everyone else on Election Day. Donald Trump was not the voice he was looking for, to put it mildly, but he has responded to the Trump cyclone with modulated restraint. Perry said he assumes his most truculent rhetoric isn’t serious, the utterances of a man who assumed his words were for political effect only and had no real consequences. Now that they do, Perry is hoping to serve as a kind of ambassador to rationality. He said he is hoping for audiences soon, with Trump if the incoming president will see him, and certainly Trump’s national security team, which includes several people Perry knows, including Defense Secretary nominee James Mattis. There is little doubt the message if the meeting comes. “We are starting a new Cold War,” he says. “We seem to be sleepwalking into this new nuclear arms race. … We and the Russians and others don’t understand what we are doing.” “I am not suggesting that this Cold War and this arms race is identical to the old one,” Perry added. “But in many ways, it is just as bad, just as dangerous. And totally unnecessary.” \*\*\* Perry had been brooding over the question for a year. It was in the early 1950s, he was still in his 20s, and the subject was partial differential equations—the topic of his Ph.D. thesis. A particular problem had been absorbing him, day in and day out, hours and hours on end. Then, out of nowhere, a light came on. Math for Perry represented analytical discipline, a way of achieving mastery not only over numerical problems but any hard problem, by breaking it down into essential parts, distilling complexity into simplicity. | Photo via the William J. Perry Project “I woke up in the middle of the night, and it was all there,” Perry recalled. “It was all there, and I got out of bed and sat down. The next two or three hours, I wrote my thesis, and from the first word I wrote down, I never doubted what the last word was going to be: It was a magic moment.” The story is a reminder of something definitional about Bill Perry. Before he became in recent years an apostle of disarmament, before he sat atop the nation’s war-making apparatus in the 1990s, before he was the executive of a defense contractor specializing in the most complex arenas of Cold War surveillance in the 1960s, he was a young man in love with mathematics. In those days, Perry had planned on a career as a math professor. His attraction to math was not merely practical, in the way that engineers or architects rely on math. The appeal was just as much aesthetic, in ways that people who are not numbers people—political life tends to be dominated by word people—cannot easily comprehend. To Perry’s mind, there was a purity to math, a beauty to the patterns and relationships, that was not unlike music. Math for Perry represented analytical discipline, a way of achieving mastery not only over numerical problems but any hard problem, by breaking it down into essential parts, distilling complexity into simplicity. This trait was why Pentagon reporters in the 1990s liked spending time around Perry. When most public officials are asked a question, one studies the transcript later to decipher a succession of starts and stalls, sentence fragments and ellipses, that cumulatively convey an impressionistic sense of mind but no clear fixed meaning. Perry’s sentences, by contrast, always cut with surgical precision. It was one reason Clinton White House officials often held their breath when he gave interviews—Perry might make news by being clear on subjects, such as ethnic warfare in the Balkans or a nuclear showdown in North Korea, that the West Wing preferred to try to fog over.

“I’ve never been able to attack a policy problem with a mathematical formula,” he recalled, “but I have always believed that the rigorous way of thinking about a problem was good. It separated the fact from the bullshit, and that’s very important sometimes, to separate what you can from what you would hope you can do.”

Just how high is the risk? The answer is ultimately unknowable. Perry’s point, though, is that it’s a hell of a lot higher than you think. | M. Scott Mahaskey/POLITICO

Perry wishes more people were familiar with the concept of “expected value.” That is a statistical way of understanding events of very large magnitude that have a low probability. The large magnitude event could be something good, like winning a lottery ticket. Or it could be something bad, like a nuclear bomb exploding. Because the odds of winning the lottery are so low, the rational thing is to save your money and not buy the ticket. As for a nuclear explosion, by Perry’s lights, the consequences are so grave that the rational thing would be for people in the United States and everywhere to be in a state of peak alarm about their vulnerability, and for political debate to be dominated by discussion of how to reduce the risk.

And just how high is the risk? The answer of course is ultimately unknowable. Perry’s point, though, is that it’s a hell of a lot higher than you think.

Perry invites his listeners to consider all the various scenarios that might lead to a nuclear event. “Mathematically speaking, you add those all together in one year it is still just a possibility, not a probability,” he reckons. “But then you go out ten, twenty years and each time this possibility repeats itself, and then it starts to become a probability. How much time we have to get those possibility numbers lower, I don’t know. But sooner or later the odds are going to get us, I am afraid.”

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Almost uniquely among living Americans, Bill Perry has actually faced down the prospect of nuclear war before—twice. In the fall of 1962, Bill Perry was 35, father of five young children, living in the Bay Area and serving as director of Sylvania’s Electronic Defense Laboratories—driving his station wagon to recitals in between studying missile trajectories and the radius of nuclear detonations. Where he resided was not then called Silicon Valley, but the exuberance and spirit of creative possibility we now associate with the region was already evident. The giants then were Bill Hewlett and David Packard, men Perry deeply admired and wished to emulate in his own business career. The innovation engine at that time, however, was not consumer technology; it was the government’s appetite for advantage in a mortal struggle against a powerful Soviet foe. Perry was known as a star in the highly complex field of weapons surveillance and interpretation. So it was not a surprise, one bright October day, for Perry to get a call from Albert “Bud” Wheelon, a friend at the Central Intelligence Agency. Wheelon said he wanted Perry in Washington for a consultation. Perry said he’d juggle his schedule and be there the next week. “No,” Wheelon responded. “I need to see you right away.” Perry caught the red-eye from San Francisco, and went straight to the CIA, where he was handed photographs whose meaning was instantly clear to him. They were of Soviet missiles stationed in Cuba. For the next couple weeks, Perry would stay up past midnight each evening poring over the latest reconnaissance photos and help write the analysis that senior officials would present the next morning to President Kennedy. Perry experienced the crisis partly as ordinary citizen, hearing Kennedy on television draw an unambiguous line against Soviet missiles in this hemisphere and promising that any attack would be met with “a full retaliatory response.” But he possessed context, about the capabilities of weapons and the daily state of play in the crisis, that gave him a vantage point superior to that of all but perhaps a few dozen people. “I was part of a small team—six or eight people,” he recounted of those days 54 years earlier. “Half of them technical experts, half of them intelligence analysts, or photo interpreters. It was a minor role but I was seeing all the information coming in. I thought every day when I went back to the hotel it was the last day of my life because I knew exactly what nuclear weapons could do. I knew it was not just a lot of people getting killed. It was the end of civilization and I thought it was about to happen.” Left: A January 1963 aerial photo showing that the Soviets had disbanded medium- and intermediate-range ballistic missile sites in Cuba. Right: Soviet freighter Polzunov (top) loaded with nuclear missiles removed from Cuba, is escorted by American destroyer Vesole outside Cuban waters on trek back to Russia near end of Cuban Missile Crisis. | Defense Department; Carl Mydans/The LIFE Picture Collection/Getty Images It was years later that Perry, like other more senior participants in the crisis, learned how right that appraisal was. Nuclear bombs weren’t only heading toward Cuba on Soviet ships, as Kennedy believed and announced to Americans at the time. Some of them were already there, and local commanders had been given authority to use them if Americans launched a preemptive raid on Cuba, as Kennedy was being urged, goaded even, by Air Force Gen. Curtis LeMay and other military commanders. At the same time, Soviet submarines were armed and one commander had been on the verge of launching them until other officers on the vessel talked him out of it. Either event would have in turn sent U.S. missiles flying. The Cuban Missile Crisis recounting is one of the dramatic peaks in “My Journey on the Nuclear Brink,” the memoir Perry published last fall. It is a book laced with other close calls—like November 9, 1979, when Perry was awakened in the middle of the night by a watch officer at the North American Aerospace and Defense Command (NORAD) reporting that his computers showed 200 Soviet missiles in flight toward the United States. For a frozen moment, Perry thought: This is it—This is how it ends. The watch officer soon set him at ease. It was a computer error, and he was calling to see whether Perry, the technology expert, had any explanation. It took a couple days to discover the low-tech answer: Someone had carelessly left a crisis-simulation training tape in the computer. All was well. But what if this blunder had happened in the middle of a real crisis, with leaders in Washington and Moscow already on high alert? The inescapable conclusion was the same as it was in 1962: The world skirting nuclear Armageddon as much by good luck as by skilled crisis management. Perry is part of a distinct cohort in American history, one that didn’t come home with the large-living ethos of the World War II generation, but took responsibility for cleaning up the world that the war bequeathed. He was a 14-year-old in Butler, Pennsylvania when he heard the news of the Pearl Harbor attack in a friend’s living room, and had the disappointed realization that the war might be over by the time he was old enough to fight in it. That turned out to be true—he was just shy of 18 at war’s end—a fact that places Perry in what demographers have called the “Silent Generation,” too young for one war but already middle-aged by the time college campuses erupted over Vietnam. Like many in his generation, Perry was not so much silent as deeply dutiful, with an understated style that served as a genial, dry-witted exterior to a life in which success was defined by how faithfully one met his responsibilities. Perry said he became aware, first gradually and over time profoundly, of the surreal contradictions of his professional life. His work—first at Sylvania and then at ESL, a highly successful defense contracting firm he co-founded in 1963—was relentlessly logical, analyzing Soviet threats and intentions and coming up with rational responses to deter them. But each rational move was part of a supremely irrational dynamic—“mutually assured destruction”—that placed the threat of massive casualties at the heart of America’s basic strategic thinking. It was the kind of framework in which policymakers could accept that a mere 25 million people dead was good news. Also the kind that in one year alone led the United States to produce 8,000 nuclear bombs. By the end, the Cold War left the planet with about 70,000 bombs ([a total that](https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat) is now down to about 15,500). “I think probably everybody who was involved in nuclear weapons in those days would see the two sides of it,” Perry recalls, “the logic of deterrence and the madness of deterrence, and there was no mistake, I think, that the acronym was MAD.” \*\*\* Perry has been at the forefront of a movement that he considers the sane and only alternative, and he has joined forces with other leading Cold Warriors who in another era would likely have derided their vision as naïve. In January 2007, he was a co-author of a remarkable commentary that ran on the op-ed page of the Wall Street Journal. It was signed also by two former secretaries of state, George Schulz and Henry Kissinger and by Sam Nunn, a former chairman of the Senate Armed Services Committee—all leading military hawks and foreign policy realists who came together to argue for something radical: that the goal of U.S. policy should be not merely the reduction and control of atomic arms, it should be the ultimate elimination of all nuclear weapons. This sounded like gauzy utopianism, especially bizarre coming from supremely pragmatic men. But Perry and the others always made clear they were describing a long-term ideal, one that would only be achieved through a series of more incremental steps. The vision was stirring enough that it was endorsed by President Obama in his opening weeks in office, in a March 2009 address in Prague. In retrospect, Obama’s speech may have been the high point for the vision of abolition. “A huge amount of progress was made,” recalled Shultz, now 93. “Now it is going in the other direction.” “We have less danger of an all-out war with Russia,” in Nunn’s view. “But we have more danger of some type of accident, miscalculation, cyber interference, a terrorist group getting a nuclear weapon. It requires a lot more attention than world leaders are giving it.” Perry’s goal now is much more defensive than it was just a few years ago—halting what has become inexorable momentum toward reviving Cold War assumptions about the central role of nukes in national security. More recently he’s added yet another recruit to his cause: California Governor Jerry Brown. Brown, now 78, met Perry a year ago, after deciding that he wanted to devote his remaining time in public service mainly to what he sees as civilization’s two existential issues, climate change and nuclear weapons. Brown said he became fixated on spreading Perry’s message after reading his memoir: He recently gave a copy to President Obama and is trying to bend the ear of others with influence in Washington. If Bill Perry has a gift for understatement, Brown has a gift for the theatrical. In an interview at the governor’s mansion in Sacramento, he wonders why everyone is not paying attention to his new friend and his warnings for mankind. “He is at the brink! At the brink! Not WAS at the brink—IS at the brink,” Brown exclaimed. “But no one else is.” A California governor can have more influence, at least indirectly, than one might think, due to the state’s outsized role in policy debates and the fact that the University of California’s Board of Regents helps manage some of the nation’s top weapons laboratories, which study and design nuclear weapons. Brown, who was a vocal critic in the 1980s of what he called America's "nuclear addiction," reviewed Perry's recent memoir in the New York Review of Books, and said he is determined to help his new friend spread his message. “Everybody is, 'we are not at the brink,' and we have this guy Perry who says we are. It is the thesis that is being ignored." Even if more influential people wake up to Perry’s message—a nuclear event is more likely and will be more terrible than you realize—a hard questions remains: Now what? This is where Perry’s pragmatism comes back into play. The smartest move, he thinks, is to eliminate the riskiest part of the system. If we can’t eliminate all nukes, Perry argues, we could at least eliminate one leg of the so-called nuclear triad, intercontinental ballistic missiles. These are especially prone to an accidental nuclear war, if they are launched by accident or due to miscalculation by a leader operating with only minutes to spare. Nuclear weapons carried by submarines beneath the sea or aboard bomber planes, he argues, are logically more than enough to deter Russia.

The problem, he knows, is that logic is not necessarily the prevailing force in political debates. Psychology is, and this seems to be dictating not merely that we deter a Russian military force that is modernizing its weapons but that we have a force that is self-evidently superior to them.

It is an argument that strikes Perry as drearily familiar to the old days. Which leads him the conclusion that the only long-term way out is to persuade a younger generation to make a different choice.

His granddaughter, Lisa Perry, is precisely in the cohort he needs to reach. At first she had some uncomfortable news for her grandfather: Not many in her generation thought much about the issue.

“The more I learned from him about nuclear weapons the more concerned I was that my generation had this massive and dangerous blind spot in our understanding of the world,” she said in an interview. “Nuclear weapons are the biggest public health issue I can think of.”

But she has not lost hope that their efforts can make a difference, and today she has put her graduate studies in public health on hold to work full time for the Perry Project as its social media and web manager. “It can be easy to get discouraged about being able to do anything to change our course,” she said. “But the good news is that nuclear weapons are actually something that we as humans can control...but first we need to start the conversation.”

It was with her help that Perry went on Reddit to [field questions](https://www.reddit.com/r/IAmA/comments/4a0ga4/iam_william_j_perry_former_secretary_of_defense/) ranging from how his PhD in mathematics prepared him to what young people need to understand.

“As a 90s baby I never lived in the Cold War era,” wrote one participant, with the Reddit username BobinForApples. “What is one thing today's generations will never understand about life during the Cold War?”

Perry answered, as SecDef19: “Because you were born in the 1990s, you did not experience the daily terror of ‘duck and cover’ drills as my children did. Therefore the appropriate fear of nuclear weapons is not part of your heritage, but the danger is just as real now as it was then. It will be up to your generation to develop the policies to deal with the deadly nuclear legacy that is still very much with us.”

For the former defense secretary, the task now is to finally—belatedly—prove Einstein wrong. The physicist said in 1946: “The unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe.”

In Perry’s view the only way to avoid it is by directly contemplating catastrophe—and doing so face to face with the world’s largest nuclear power, Russia, as he recently did in a forum in Luxembourg with several like-minded Russians he says are brave enough to speak out about nuclear dangers in the era of Putin.

#### A cautious futurity is the only way to confront anti-queer violence. The alternative forecloses alternative futures and dooms queer folks with a desire for better to the status quo.

**Manalansan ‘15**

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My response to the question of “no future” comes from my encounters, engagements, and conversations with colleagues under the aegis of queer-of-color critique, scholars like David Eng, Gayatri Gopinath, Roderick Ferguson, Chandan Reddy, and the late José Esteban Muñoz, among others. We appreciate the renegade antireproductive stance of the “no future” camp, which states that we should not subscribe to a future that is entrenched in heteropatriarchal dreams of marriage and procreation. **However, there was a general sense** among us **that the issue of “no future” comes from a vantage point and a** **comfortable perch of privilege.** **As a scholar** invested and **immersed in the plight of queers of color,** **futurity is not just a possibility but a necessity.** **To paraphrase** my **queer-of-color critique colleagues**, **we cannot not think of a future**—**it is the very fuel of existence**, the pivot **that animates** and propels **energies**, performances, **feelings, and other bodily capacities. The promise** and peril **of queer**, **both as a stance and as a field of study**, **is precisely in its** anticipatory and **hopeful dimensions. Queer is constituted by a yearning and a longing for something better than what is here right now**. **It is**, as Muñoz would say, **a horizon that we are drawn to and which is not yet here.** **Consider** **the group of** **undocumented immigrant queers of color** **in New York City whose lives I have been following for years.** Dwelling in cramped domiciles and working in contingent jobs, there is very little to witness in their lives that suggests a kind of gay/lesbian triumphalism or the bright markers of the new normal. In fact, **they live in precarious conditions but**—a very important caveat—**they live** in **moments that showcase** fleeting gestures and images of **fabulosity** set amidst the squalor and mess of their lives. **These moments**, while fleeting, **provide some way for them to think of another day**, giving them a brief glimpse of a time and a place where there are sequined gowns, plush salons, and many sparkling things. **While this might be called naïve hopefulness**, **thinking of a future that is an alternative to the present is a potent way to think beyond and against the status quo**—**to plant the seed for** social **transformation.** **In other words, there is a political potential to queer futurity.** Or, to put it another way, **we need to** **complicate and** **unravel the negativity inherent in the “no future” stance and to be open to the various alternative ways** a future or **futures can be imagined**, **particularly by those in the margins.** Otherwise, we can all just pack our bags, go back home, put on some makeup, close the door, and hide under the bedcovers.

### 2AC---State Good

#### Refusal of homo-nationalist critique to engage the state recreates neoliberal ideology by falsely staticizing the state as always violent---tactical engagement is better than pure rejection

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As Foucault himself warns state-phobia is deeply inscribed in liberal and neo-liberal ideas of civil society. The wickedness of the state is juxta- posed against the inherent goodness of civil society, so that the aim is the ‘whithering away of the state’. This anti-state-centric approach to political power, locates radical politics in extra-state space of innovation. This is why Puar and others reject pragmatic politics of same-sex marriage or anti-discrimination legislations. In contrast they support civil society campaigns like pink-watching that increasingly deploy the strategy of surveillance for shaming states into good behavior. Even as one critiques the harnessing of gender and sexuality by neo-liberal capitalism, the rejection of all feminist- queer politics oriented towards the state as part of a biopolitical agenda is disingenuous state-phobic rhetoric.

Postcolonial-queer-feminists are caught in an ambivalent, double-bind vis-à-vis the state: On the one hand, the state has historically been the source of violence and repression through the criminalization and pathologization of non-normative sexual practices. And yet, queer strategies seek to instru- mentalize the state to promote sexual justice. Even as the state is known to perpetuate heteronormative ideologies, which are founding myths of nations, the hope is that the state can function as a site of redress of gender and sexual inequality. Despite the problematic track-record with regard to sexual politics of all nation-states, whether European or non-European, it is dangerous to disregard the immense political implications of state-phobic positions, which are increasingly popular in radical discourses in the West.

As the recent re-criminalization of homosexuality in Uganda, India and Nigeria demonstrate, negotiations with state are indispensable and imperative for emancipatory queer politics in the global South. This is not a plea for statism; rather, one must be aware of the dangers of the replacement of state with non-state actors as motors of justice. Against this background, the recent anti-statist stance within postcolonial queer scholarship is alarming, as it ignores the importance of the state for those citizens who do not have access to transnational counterpublic spheres to address their grievances.

Decolonization, whether in USA, Israel or India, cannot be achieved merely through a strategy of shaming the state. Rather in the Gramscian- Spivakian sense, it is imperative to enable vulnerable disenfranchised indi- viduals and groups to access the state (Dhawan 􀀲􀀰􀀱􀀳). Accordingly, instead of a for or against position vis-à-vis the state, the more challenging question is how to reconﬁgure the state, given that its institutions and policies are the mobile eﬀect of a regime of multiple governmentalities. Thus the chal- lenge is how to pursue a non-statephobic queer politics that at the same time neither rationalizes the biopolitical state project nor makes the queer bodies governable. In postcolonial contexts, the state is like a pharmakon , namely, both poison and medicine. Postcolonial queer politics must explore strategies of converting poison into counterpoison (Spivak 􀀲􀀰􀀰􀀷: 􀀷􀀱).

Herein the ambivalent function of the state must be addressed. As Pharmakon, the inherent condradictions must be engaged with: Violence and justice, ideology and emancipation, law and discipline. If, following Foucault, the state has no stable essence, then it is marked by undecidability or doubleness. The sole focus on the negative aspects of the Pharmakon, namely the destructive and repressive traits, neutralizes and ignores the enabling and empowering aspects. Thus postcolonial-queer-feminist poli- tics must transform poison into remedy and formulate critique of the state beyond state-phobia. A challenging task, but anything else would be too risky!

#### Their critique totalizes the state and legal reform---that dooms praxis.

Helander, 15—University of Gothenburg, Department of Cultural Sciences (Disa, “Making feminist arguments against borders and regulated migration,” <https://gupea.ub.gu.se/bitstream/2077/40548/1/gupea_2077_40548_1.pdf>, dml)

De Genova does not spell out any concrete strategies of action, apart from his argument against struggling through citizenship or seeking recognition from the state in the form of citizenship, since this, he argues, would reinscribe the legitimacy and necessity of the state, as well as undermine the wider struggles by domesticating insurgent energies within the orbit of the state (De Genova 2007:441-2). Struggling through or for citizenship is also, in De Genova's view, a symptom of still being caught within methodological nationalism and methodological stasism (De Genova 2013). However, as I have already discussed in my analysis of Agamben, since it is very difficult and dangerous to live without authorisation, not least in a very formalised society such as Sweden (Hellgren 2014), in my view it is untenable to maintain a strategy of non-engagement with the state. Dimitris Papadopoulos and Vassilis Tsianos (2013:193) speak of their collaborator, Sapik, who chose to return to a life without legal status in Greece instead of obtaining residence permit in Germany; but not everyone could make that choice. Who can live with that insecurity? What if you really need the security of legal status as a guarantee that you will not be deported, so that you can start processing your traumas? What if you have your children with you? What if you need to know you can stay in order to imagine a future? Obtaining a residence permit is the top priority of most people I know who live without legal status, and the struggle to obtain it cannot be dismissed as in vain, as misguided, or as wrong. For all the problematic implications of seeking recognition and permission from the state, one cannot dismiss the immediate necessity of doing so for those who are currently refused it. From my experience, we have to engage with the state even if we do not like it. We have to try to obtain residence permits for those who do not have it but who want it. People's lives must, when in conflict, stand above a principled opposition to the state and to citizenship. We also have to engage with the state in making education, health care and other social services available to everyone, independent of their migration status. Then of course, as I argue elsewhere, we must think about how we engage with the state, on what terms, and what arguments we use (see for example McNevin 2013 and Walia 2013:182-7 for the same kind of arguments).

In addition, as Tanya Basok, Danièle Bélanger and Eloy Rivas (2014:1397) observe, 'when migrant workers attempt to minimise the disciplinary power of the deportation regime, they engage in practices of discipline and self-discipline and thereby co-construct the deportation regime'. This points to the difficulty of avoiding, escaping or standing outside of the reach of the state and the border-regime, and thus the need for strategies that provide ways of being in them, of changing them and of dealing with them, rather than arguing, as De Genova implies, that we have to refrain from engaging with them. Moving on to my second topic, reading De Genova's arguments through the embodied lives of unauthorised migrants and through feminist theory, points to at least one issue that warrants further attention: how borders and deportability are entangled with other power structures. The fact that De Genova does not discuss this, except race, to which he does pay attention, means that he does not provide enough means of understanding how people are differently targeted by borders and deportability. They do indeed target people differently and people are varyingly vulnerable to them. For example, Tanya Golash-Boza and Pierrette Hondagneu-Sotelo (referred to in Doering-White et al. 20147 ) argue that there is a 'gendered racial removal program' in the US particularly targeting Mexican and central american men. Furthermore, appearance makes people more or less vulnerable. Writing about 'white space' (and nations might be imagined as such), Ahmed (2007:161-3) argues that some bodies are more easily identifiable as 'out of place', as 'strangers', that some bodies – more than others – encounter resistance when moving through space and are 'stopped'. When it comes to in-state enforcement of immigration law, Kate Hepworth (in Villegas 2015:188) argues that '[a]n individual may be identified as out-of-place through somatic traits such as race, as well as through more intimate, emplaced relations: through how that body behaves in place […] how the body is clothed […] the activities in which it is engaged […] its emplacement in time or space and the manner of that emplacement'. Other factors may also increase the general vulnerability of lacking legal status. As Paloma Villegas shows, precarious legal status might make women and LGBTIQ-people more vulnerable to harassment and deportation, since they cannot, in cases of harassment or violations, fight back, challenge it or report it to the authorities in they way they could have done if their legal status was secure, which perpetrators might know and exploit (Villegas 2015:191-2). Depending on class, racialisation and other factors, people also have different possibilities to 'pass' as a citizen or as having legal status (see for example Villegas 2015:188). If, as Catherine Dauvergne puts it, '[w]e imagine illegals as poor and brown and destitute' (in Villegas 2015:186), those who are read as such are at greater risk of being stopped in internal border controls. Those who do not 'stand out' or who can pass as legal, are not safe, but safer. As a friend of mine explained, when he was 'illegally' travelling through Europe to get to Sweden, if it were not for his light skin tone he might not have been able to pass unnoticed. He said people probably read him as Italian rather than Afghan. Or as another person told me, when encountering police officers checking IDs as part of the internal border controls, the fact that he had a girlfriend whose 'Swedishness' was never questioned and that they spoke Swedish with each other, meant that he was not stopped while most other negatively racialised people were.8 Paying attention to how borders and deportability affect and target people differently provides more complex accounts of how they work, and is also necessary when it comes to strategy. It shows that people have very different possibilities for dealing with deportability and for subverting borders, that people might need different strategies for coping with it. Further, it also suggests that deportability and borders produce more than just docile workers, which is what De Genova focuses on. For instance, they produce women, LGBTIQ-people, or racialised people who are unable (or less able) to respond to, challenge or report harassment, hate-crimes or other forms of violence or injustices committed against them; they produce whiteness by encouraging people to pass, and by disproportionally deporting people otherwise racialised; and they make LGBTIQ people pass as straight and gender-conforming in order to avoid exposing themselves to dangerous situations. Moving on, I will now read De Genova's arguments through the context of asylummigration. De Genova primarily discusses migration through labour, but reading him in the context in which I am active – where most of the unauthorised migrants I meet have migrated primarily in order to claim asylum – provides a more complex account of how the state, borders and regulated migration work, and how they are entangled with other power structures. For many working within the 'autonomous migration' approach, which De Genova does, it is a conscious decision to resist 'the heterogenising practices of state regulation of mobility' which divides it into different 'types' of migration, for example labour, asylum or family, and instead they 'attempt[...] to articulate their commonalities' (Papadopoulos & Tsianos 2013:185). I maintain, however, that despite the intentions, this homogenising entails a risk of losing critical insight. As mentioned in the introduction, 'the refugee' is imagined as a man fleeing persecution by a totalitarian state and seeking asylum in the liberal, tolerant states of the West (Anderson 2013:55-6). This means that people fleeing from something that does not fit well into this idea often have troubles being recognised. Gender and sexuality often pose particular problems to obtaining recognition (which is not to say that it is otherwise easy). In order to think about recognition I turn to Bulter, even though her work on recognition is not specifically about asylum it is still applicable in this context. The process of deciding who is recognizable, or trustworthy, as human, and specifically who fulfils the requirements for asylum, is governed by the language and norms that frame this situation, and by the narrative capacity for giving a legible account (see for example Butler 2005:12). As Butler argues, 'there is a language that frames the encounter, and embedded in that language is a set of norms concerning what will and will not constitute recognizability' (Butler 2005:30). I must conform, among other things, to the norms of narration and causality, as well as the categories, classifications and identificatory schemas that govern this situation, which in the context of asylum are not only specifically western and liberal, but also specifically legal. If you are, for instance, seeking asylum on the basis of sexuality you must also be recognisable as say, a lesbian. You must tell your story in a chronological narrative, use a language and reasoning which is understood, and conform to the adjudicators' conceptions of how for example 'lesbians', 'trans\*people', or 'women' are, look and act, conceptions that are sometimes narrowly western, middle-class, heteronormative and liberal, and sometimes, on the contrary, racialised conceptions about what, for example, 'Muslim women' do or look like. As Katherine Fobear (2014:52) puts it: 'the effort to prove to the adjudicators that they belong to a sexual and/or gender minority becomes heavily racialized and classed. Sexual exceptionalism works by first glossing over the boundaries of gender, race, and class formations and then implicitly privileging white and western gay norms'. There are innumerable examples. Lesbians can be denied asylum because they do not look 'lesbian', because they have children, or because they do not show any interest in 'lesbian culture' (Lewis 2013). In my experience LGBTIQ-people may be rejected because they cannot provide a narrative account of when they first realised that they 'were' LGBTIQ or reflect in sufficiently elaborate ways on their sexuality/identity. People may be refused because it is not deemed credible that a woman in a patriarchal society would defy her husband, or because the asylum adjudicators are unable to recognise that men can also be victims of honour-violence. The asylum-system is part of the production of worlds and nations. It produces identities, performances, discourses and representations, enacted both by asylum-seekers and their supporters and by the state. Sima Shakhsari (2013:568) argues that '[i]n order to present a successful and legitimate claim to asylum officers, the refugee/asylum seeker often has to repeat a story that inevitably demonizes the “home country”' and Lewis claims, '[i]n the context of refugee law, states will only grant political asylum to women who appear vulnerable either because they are openly lesbian or because they are foreign women in need of rescue from oppressive patriarchal – read third world – cultures' (Keenan 2011:39 in Lewis 2013:180). Similarly, Fobear (2014:53) argues that '[i]n order to prove persecution, sexual and gender minority claimants may have to inferiorize and pathologize their ethnic, religious, or cultural communities in order to fit into Canada's national fantasies of being a safe haven to marginalized populations'. Further, through the state's management of 'the political and cultural production of refugee identities in public sphere', presenting refugees (particularly women) as victims and Canada as the 'white knight' saviour, 'the whiteness of Canadian settlement is maintained through the othering of refugees as inherently separate to the nation' (Fobear 2014:51). This demonises and inferiorises places that people have fled from and elevates the receiving states above such things, 'produc[ing] a discursive erasure of the very real forms of heterosexism and homo/transphobic violence present in Canada [and other asylum-receiving places in the Global North] today' (2014:53). Thus, attending to asylum, and in particular to the problems facing many women and LGBTIQ-people seeking asylum, demonstrates two interrelated things: borders produce particular forms of gender and sexuality, and the state gains more than just capital accumulation. The state produces itself as 'modern', 'tolerant' and 'generous', differentiating itself from 'other' 'backwards', 'intolerant', 'uncivilised', 'oppressive' places. Asylum plays a significant role in the production of the national self-image as well as in geopolitics (manifested in, for example, the principled acceptance – or rejection – of all asylum-seekers from a particular country in order to make a point about the situation in that country of origin) (Shakhsari 2013; Fobear 2014; Luibhéid 2005:xvii; Anderson 2013).

Reading De Genova's arguments through feminist theory and through material contexts, it becomes clear that his view on the state and borders as having only one, or at least one primary, objective and logic – capital – needs to be complicated. Firstly, as the wealth of scholarship on intersectionality has made clear: various power structures are entangled/intraact, and to understand how capitalism, economic exploitation and borders work, one has to attend to how they are entangled with, say, race, gender, sexuality, ability and nationality. Secondly, as I discussed above in the section on Agamben, objects – the state, or borders – are not singular, unitary, coherent 'things', but complex and contradictory sets of patternings, promises and projections (Berlant 2006) or 'phenomena' in 'intra-action' (Barad 2003). This is not only a theoretical argument but is also apparent empirically. The state consists of a great variety of departments, branches, agencies, civil servants, locations, layers, practices and promises, and surely all of these sometimes have disparate objectives and sometimes do things that have completely contradictory outcomes. The same goes for borders. The state and borders may have several objectives and outcomes – facilitating capital accumulation, securing legitimacy among its inhabitants, securing continued governance for the incumbent parties, and creating a favourable standing in the international arena – while individual civil servants may have other priorities, such as keeping their job, advancing their career, keeping budget, or even using their position to do as much good as possible. Sometimes these go hand in hand, but sometimes they do not. To properly understand how borders work – and consequently to make good arguments and strategies against them – we must properly take into account how they are entangled with multiple power structures, how they may serve various different objectives on part of the state, and how both the state and borders are internally complex and contradictory.

Thus, borders produce not only an exploitable labour-force, but also a range of other subjects. As Anderson et al. (2009:7) argue, '[i]t is not only “hard workers” who are produced at the border. “Good wives” who do not challenge patriarchal families, “straight guys and gals” who adhere to correct sexual scripts, “good parents” whose parenting accords with the requirements to produce “good children” are policed through immigration requirements'. Thus, borders do not just produce capital accumulation and economic inequality, they also produce nations, Peoples9 , populations, families, hetero- and homonormativity, racialisation of people and of places, and shape thinking, theory and methodology (see for example Wimmer and Glick Schiller (2002) and De Genova (2013) on methodological nationalism).

To conclude, while there are several good points in De Genova'a arguments, to make them better, and to make them into useful strategies, they must be complicated. This necessary complication occurs primarily by connecting them to various other power structures, and by seeing the state and borders not as monolithic, given, things, but as complex patternings, involving a variety of practices, that may both be resources to us, and sites of domination (Berlant in Seitz 2013), and with which we sometimes have to interact, even if we would prefer to bypass them altogether.

Indigenous perspectives and border imperialism: Strategies, homonationalism, the freedom to stay, and necropolitics

In order to explore in what ways Walia's work might provide good arguments and strategies against borders, and how they might be further developed, I focus on four topics. Firstly, by attending to the practical situation of unauthorised migrants' immediate need for a residence permit I discuss what might appear as a strategical contradiction to seek permission by the state whilst being opposed to regulated migration. I explore this possible dilemma by reading it through Butler, Berlant and Barad. Secondly, I read Walia through Puar's work on sexuality and homonationalism. Thirdly, I focus on (the indigenous demand for) 'the freedom to stay' and connect it to the need to pay attention to people's very varying possibilities or abilities to migrate and to be mobile. Finally, I take the cue from Walia's argument about borders as racialising practices and turn to Achille Mbembe to discuss the racialised indifference to the death of migrants.

Unsurprisingly, since Walia writes from within a movement of migrant justice, her arguments provide much more concrete and applicable strategies than any other of the approaches that I discuss here. She argues for the need to build solidarity and alliances with other groups, particularly indigenous peoples, and her arguments about the connection between borders, capitalism and racialisation should also encourage solidarity on behalf of otherwise racialised peoples who have citizenship or secure migration status, as well as on the part of wage labourers. The strategies she discusses take into account the immediate situation and needs of unauthorised migrants. For example, she recognises the need of

navigating state institutions like border agencies, immigration offices […] in order to support those facing detention and deportation. Such organizing to meet the immediate needs of undocumented migrants and refugees changes migrants' material conditions by, for example, winning legal resident status, which then facilitates them becoming more involved in radical movements. It also works to build long-term relationships of confidence and trust, and provides a means through which to share our own analysis (Walia 2013:183).

#### Queer negativity fits neatly within the politics of negation which sustains the social order – alt fails even if they win the ontology debate

Seely 16 (Stephen D, “Sexual Difference in/and the Queer beyond of Ethics”, Feminist Formations, Volume 29, Issue 3) DB

While I agree with Edelman that queerness names the beyond of the ethical, and while I also agree that this is precisely queerness’s “ethical value,” I argue that Edelman’s conflation of queerness with radical negativity and antisociality does not ultimately challenge the heterosexism of Sittlichkeit in the way that he suggests. In the first place, Edelman’s contention that queerness names the resistance to all structural determinations is merely an instantiation of what Hegel calls “abstract negation” or “negative freedom.” Indeed, Hegel describes this form of negation in words that could have been written about Edelman himself: It reckons any content as a limit and flees from it. If the will determines itself in this way, or if representational thought considers this aspect in itself as freedom and holds fast to it, this is negative freedom . . . becoming actual it assumes both in politics and religion the form of a fanaticism, which would destroy the established social order, remove any individuals suspected of desiring any kind of order, and demolish any organization which then sought to rise out of the ruins. Only in destroying something does this negative will feel that it has reality. (2005, 6) Positing queerness as a form of abstract negation or negative freedom is thus not to give it a place outside of the Hegelian ethical dialectic at all, but is instead, to lock it into a reactive, circular dialectic—what Hegel would call a “bad infinite”—with all forms of social order.5 And unless Edelman’s form of queerness is to remain abstract or purely theoretical—which would almost certainly mean having absolutely no impact on the heteronormativity of Sittlichkeit whatsoever—it must be actualized, and to actualize queerness as the negation of “every social structure or form” could lead only to the following: a nihilistic pleasure-seeking or “acting out” (necessarily nihilistic because the attribution of any value to the action would be to give it a structural and symbolic determination); the conflation of queerness and sociopathy; and a form of queer Jacobinism in which queerness’s form as the negation of structural determination is more important than any particular action, and in which any “queer” may be accused of betraying queerness by acting according to social or political content.6 It is therefore difficult to see how such a form of nihilism (literally, that which negates all value) could have the “ethical value” that Edelman claims it has, or how it could ultimately offer any serious challenge to the heteronormativity of Sittlichkeit.

**State-based politics are critical to subvert heteronormativity**

**Chambers and Carver 8** Samuel Allen and Terrell, Judith Butler and Political Theory: Troubling Politics, pg. 156-157

Finally, **heteronormativity can also be subverted at the level of public policy.** **The trend in recent years, particularly in the US, has been to make heteronormativity more explicit by writing it into the law, where it previously was not mentioned** (and for potentially subversive countertrends, see Carver 2007). The Federal Defense of Marriage Act **(DOMA)** and the dozens of state DOMAs all serve to **codify the presumption of heteronormativity by announcing it plainly. In one sense, this is a dramatic setback** in the struggle for equal civil rights for lesbian and gay citizens – a fact that should not be downplayed**. Nevertheless, in the politics of norms the very effort required to defend heteronormativity outwardly suggests a certain weakening of the norm.** And **legislators across the US have made it clear that they see themselves as responding to an imminent threat.** This threat is certainly not, as those legislators would have it, against the 'sacred institution of marriage', but it may well be **a threat to heteronormativity, to the easy presumption of heterosexuality**. Perhaps the legalisation of gay marriage will prove subversive on this front, if and when it happens. Perhaps it will not (Warner 1999). However, and in any event, from within the theory of subversion that we have articulated here, **the most subversive move of all would come, on the level of national public policy**, in simply eliminating state-sactioned marriage altogether.

#### No Cruel pessimism.

Cornell and Seely 16 – \*PhD, Women’s Studies & Comparative Lit @ Rutgers, \*\*PhD Candidate @ Rutgers (Drucilla and Stephen, “The Spirit of Revolution,” p. 11-14)

More recently, further objections have been made within queer and affect theory in particular to the normativizing tendencies inherent in politics in general: perhaps political optimism or revolutionary hope are simply ways of interpellating queer subjects into compulsory affective circuits in which "negative" feelings and emotions must be renounced in the name of "positive" ones, or into certain hetero- or homonormative visions of the "good life" that is to be sought in revolutionary movements. Such a process, according to some queer theorists, thus installs a form of affective normativity into politics, which demands certain investments and obscures the distribution of "positive" and "negative" feelings across gender, sexual, racial, class, and national axes (see Duggan and Munoz 2009 and Berlant 2011). As such, much recent queer theory has drawn on certain forms of psychoanalysis to advocate the political use-value of precisely these "negative" and "non-normative" affects and feelings including hopelessness, melancholia, shame, unhappiness-in the name of queer resistance (see Eng and Kazanjian 2002, Duggan and Munoz 2009, Ahmed 2010, Halperin and Traub 2010). In its most extreme form (which we take up extensively in Chapter 3 ), queer theorist Lee Edelman (2004) has argued that any politics whatsoever is always already both heteronormative and conservative insofar as it imagines "the Child" as the horizon and beneficiary of any political action. The focus on the future inherent to any political agenda, according to Edelman, involves a compulsory renunciation of the present in the name of the children who will inherit that "better" future. Queers are, according to Edelman, those not fighting for the children and are thus figured as the death drive of the social order-a status Edelman forcefully exhorts queers to actively take up in the "insist[ence] that the future stop here" (2004: 31). So does all of this mean that we are, to use Lauren Berlant's (2011) term, "cruel optimists" ?3 We would answer this simply: there is surely nothing crueler than to say that there is no way out of the horrific and brutal exploitation of advanced capitalism that leaves the majority of the world's population in conditions of dire poverty and targeted for extinction. Embracing the death drive, or what amounts to the same thing, abandoning oneself to the impending doom of the species and the planet when you have no possibility of life is not such a big deal, and is certainly not an act of "queer" or "posthumanist" resistance. Centuries ago, Immanuel Kant argued that we have a duty to be optimistic, not because things are necessarily going to get better, but because they might. For Kant, we are not obligated to believe in any particular vision of the future or its possibility, but the fact that ideals such as perpetual peace (and we would add: the end of capitalism) cannot be proven impossible obliges us to live as if (not necessarily believe) they were. To quote Kant: for there can be no obligation ... to believe something [i.e., a specific end]. What is incumbent upon us as a duty is to act in conformity with the idea of that end, even if there is not the slightest theoretical likelihood that it can be realized, as long as its impossibility cannot be demonstrated either. Now morally practical reason pronounces in us its irresistible veto: there is to be no war ... So the question is no longer whether perpetual peace is something real or a fiction, and whether we are not deceiving ourselves in our theoretical judgment when we assume that it is real. Instead we must act as if it is something real, though perhaps it is not ... and even if the complete realization of this objective always remains a pious wish, still we are certainly not deceiving ourselves in adopting the maxim of working incessantly toward it. For this is our duty .. . (1996: 490-1, emphasis added) And, moreover, as spectators (if not participants) in revolutionary struggle, we actually shape the way those struggles will be read. So for Kant, the spectators who cheered on the French Revolution played a role in history in that the significance they gave to that revolution became part of the new reality that that revolution constituted. And cannot the same be said for those who cheered on the "Arab Spring," as well as those who heroically participated in it? Can it not be said of those who stayed up all night watching the votes be counted in recent elections in Greece, Spain, and South Africa to see if new socialist parties would be voted in? The deep irony of much recent feminist and queer theory is that it effectively tells us that, in the name of "queerness" and "posthumanism," everything must ultimately remain exactly as it is, given that the hope for a different future is heteronormative and any idea of transforming the world is humanist delirium; that we should instead embrace ephemerality, extinction, and the death drive (all of which capitalism has conveniently made readily available); and that anyone who writes or claims otherwise is nothing but a nostalgic, humanist fool providing deluded idiots with cruel optimism. How do these thinkers know that we are fated to fragility, death, extinction, poverty, war, capitalism, depression, melancholia, and unbearable sex? In this book, we want to show that the "truth" they tell us about the ultimate impossibility of a more just future can, and should, be deconstructed in the name of a queer-feminist future beyond Man, a future that by the very appropriation of the word "queer" tells us that nothing is ever what it seems and that the psychic and bodily prisons that we live in are always in the process of being undone by collective revolutionary processes. Indeed, as the late queer theorist Jose Esteban Munoz insisted in his disagreements with much recent queer theory, queerness is itself a form of utopianism or "revolutionary consciousness." As he put it: It is difficult to hold onto a phrase like "revolutionary consciousness." It seems stark, out-moded, universalizing, and prescriptive. Yet I nonetheless deploy it because I want to link it specifically to the world of affect and feeling ... It is not about announcing the way things ought to be, but, instead, imagining what things could be. (Duggan and Muiioz 2009: 278) We do not wish to rehearse here the hope versus hopelessness, future versus anti-future debates that have dominated queer theory over the past decade. We do, however, want to point out the resonances of Munoz's contention that "queerness is an ideality" (2009: 1) with the Kantian duty of optimism, explicitly putting queer politics on the side of revolution: that we can imagine beyond what we can know both enables and obligates us to live according to ideals of freedom as we also struggle to bring such a world into existence. Certainly, Kant's point is that as we put ourselves into the story, we are part of it and thus pessimism becomes just as much a part of that story as optimism. And moreover, as we will discuss in Chapter 4, these stories have a profound power to materialize and rematerialize the world that we live in together. Thus, if what many contemporary theorists tell us is not truth, then it is just their own conviction-itself a form of political faith. And why have the faith that we are thoroughly fucked if there is any way for us to queer ourselves out of it? It would thus seem that many theorists have their .own form of cruel attachment-a cruel pessimism?-to the idea that revolution is something we (can) no longer desire. Perhaps this is a form of immunity to the inevitable disappointments of political struggle: we can no longer be disappointed if we no longer hope for a more just future or believe it is possible. And yet, as political theorist Jane Anna Gordon eloquently said at a recent event in New York City, "Political theory is incoherent if we accept that we are in a post-revolutionary time. All we can do then is poetically discuss resignation and impossibility. " 4 The philosophy of the limit means that the very limit to any idea of "the impossible," that is, to any metanarrative of postrevolutionary doom, leaves us with the responsibility to fight for a politics that is both revolutionary and that is constantly challenging the reign of Man in the form of colonialism, capitalism, racism, phallocentrism, and heterosexism (see Cornell 1992). As we have suggested, and will argue throughout this book, thinkers in the global South have been engaged in precisely this project for centuries. These thinkers, however, have been too involved in revolutionary struggles themselves to spend too much time hand-wringing about the humanistic arrogance of politics and the failures of feminism and socialism, or debating the value of hope versus pessimism, because there is simply too much work to be done in the struggle for total decolonization. They, in a deep and profound sense, are on the side of life, understood not as abstract "life itself," but as part of political spirituality: the struggle for different ways of living individually, collectively, and with the other beings with which we share the planet. And perhaps it is precisely to these thinkers that we must now look for the spirit of revolution and for a new practice of the human beyond Man. We close this introduction and open our book with the words of Gilles Deleuze castigating the so-called "New Philosophers" of the 1970s who critiqued Marxism and socialism for manipulating the supposedly ignorant masses: What I find really disgusting is that the New Philosophers are writing a martyrology: the Gulag and the victims of history. They live off corpses ... But there never would have been any victims if the victims had thought or spoken like our New Philosophers. The victims had to live and think in a totally different way to provide the material that so moves the New Philosophers, who weep in their name, think in their name, and give us moral lessons in their name. Those who risk their life most often think in terms of life, not death, not bitterness, and not morbid vanity. Resistance fighters are usually in love with life. No one was ever put in prison for powerlessness and pessimism-on the contrary! From the perspective of the New Philosophers, the victims were duped, because they didn't yet grasp what the New Philosophers have grasped. If I belonged to an association, I would bring a complaint against the New Philosophers: they show just a little too much contempt for the inmates of the Gulag. (2007: 144-5) With very little adjustment, could these same words not be said of our new prophets of queer hopelessness, posthumanist renunciation, and postrevolutionary pessimism?

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#### 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)

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).

#### Decline causes fascism.

Büchs and Koch, 19, Milena Büchs, Sustainability Research Institute, School of Earth and Environment, University of Leeds, Leeds, LS2 9JT, UK, Max Koch, Faculty of Social Sciences, Socialhögskolan, Lund University, Box 23, 22100 Lund, Sweden, “Challenges for the degrowth transition: The debate about wellbeing”, <https://www.sciencedirect.com/science/article/pii/S0016328718300715>

3.2. Implications of rapidly transforming social systems The social practices lens is also useful for thinking about possible wellbeing implications of rapid social change more generally, and a transition away from a growth-based economy specifically. While the concept of social practices inherently implies the possibility of change (with its focus on agency and creativity), it equally strongly highlights the structural aspects of practices which provide stability and orientation. During times of rapid social transitions, social norms and ‘mental infrastructures’ often lag behind, creating disorientation, social conflict, and negative impacts on wellbeing ([Büchs & Koch, 2017: ch. 6](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0060)). Stability of structural dimensions of social practices offers orientation and some extent of predictability of how oneself and other people are likely to act in the future, providing a framework within which flexibility and change are possible. This orienting function of structural dimensions of practices is likely to be an important condition for people to form reasonably stable identities and relationships – key ingredients for wellbeing. Examples from classical and contemporary [sociological and psychological research](https://www.sciencedirect.com/topics/social-sciences/sociological-research) suggest that different speeds of changing social structures can establish misalignments and disruptions of social practices which can, in turn, negatively influence health and other wellbeing outcomes. For instance, in his classical study, Durkheim presents suicide at least partly as an outcome of a failure of cultural resources to provide meaning and orientation in the context of other, more rapid social changes ([Durkheim, 2006](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0125); [Vega & Rumbaut, 1991: 375](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0455)). This idea also links to Bourdieu’s concept of the “hysteresis effect”. Here, Bourdieu emphasises that, especially during phases of social transition, people’s habitus and “objective” social circumstances can become disjointed: as a result of [hysteresis](https://www.sciencedirect.com/topics/social-sciences/hysteresis), dispositions can be “out of line with the field and with the ‘collective expectations’ which are constitutive of its normality. This is the case, in particular, when a field undergoes a major crisis and its regularities (even its rules) are profoundly changed” ([Bourdieu, 2000: 160](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0040)). This can contribute to a deterioration of people’s wellbeing as it makes them feel “out of place” or let them be perceived that way, “plung[ing] them deeper into failure” ([Bourdieu, 2000: 161](https://www.sciencedirect.com/science/article/pii/S0016328718300715#bib0040)) because they cannot make use of new opportunities or are mistreated or socially excluded by others. Empirical research which partly builds on the idea of hysteresis has shown that wide-ranging organisational change can have a range of negative effects on people’s health and mortality ([Ferrie et al., 1998](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0150); [McDonough & Polzer, 2012](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0315)). One study found that across 174 countries, several measures of wellbeing and social performance, including life satisfaction, health, safety and trust, voice and accountability, were highest in periods of economic stability, but lower in times of GDP growth or contraction ([O’Neill, 2015](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0355)); and other studies concluded that life expectancy can be negatively affected by both rapid economic growth and contraction ([Notzon et al., 1998](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0345); [Szreter, 1999](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0445)). Several scholars have recently highlighted the potential for social conflict inherent in (rapid) social change. For instance, Maja [Göpel (2016: 49)](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0185) remarks: “Unsurprisingly, the navigation or transition phase in shifting paradigms as well as governance solutions is marked by chaos, politicization, unease and power-ridden struggles”. Wolfgang Streeck has issued similar warnings ([Streeck et al., 2016: 169](https://www.sciencedirect.com/science/article/pii/S0016328718300715" \l "bib0435)). It is not difficult to see how such scenarios bear the potential of undermining some of the fundamental conditions that are necessary for the satisfaction of basic needs as discussed above, and hence the danger of generating substantial wellbeing losses for current and near-future generations. In the current context, it is very difficult to imagine that we might be able to observe a rapid and radical cultural change in which people adopt identities and related lifestyles that value intrinsically motivated activities over pursuing satisfaction and status through careers and consumption. Even more worryingly, political events in Europe, the United States and elsewhere since the ‘Great Crash’ of 2008 indicate that times of negative or stagnant growth can provide a breeding ground for populist, nationalistic and anti-democratic movements. Economic insecurity, a perceived threat of established identities through migrants, and deep mistrust against ‘elite’ politicians are amongst the main explanations for previously unimaginable events such as the [Brexit](https://www.sciencedirect.com/topics/social-sciences/brexit) vote, Trump presidency, and recent electoral successes for far right-wing parties in a range of European countries.