

Glenbrooks Chip 1AC

Advocacy

We affirm Resolved: A Just government ought to recognize an unconditional right of workers to strike. PICS affirm because they don't disprove my general thesis.

1] Just Govt

Anne-Marie **Slaughter**, 2-13-20**17**, "3 responsibilities every government has towards its citizens," World Economic Forum,
<https://www.weforum.org/agenda/2017/02/government-responsibility-to-citizens-anne-marie-slaughter/>

The oldest and simplest justification for government is as protector: protecting citizens from violence. Thomas Hobbes' Leviathan describes a world of unrelenting insecurity without a government to provide the safety of law and order, protecting citizens from each other and from foreign foes.

The horrors of little or no government to provide that function are on global display in the world's many fragile states and essentially ungoverned regions. **And indeed, when the chaos of war and disorder mounts too high, citizens will choose even despotic and fanatic governments, such as the Taliban and ISIS, over the depredations of warring bands. The idea of government as protector requires taxes to fund, train and equip an army and a police force; to build courts and jails; and to elect or appoint the officials to pass and implement the laws** citizens must not break. Regarding foreign threats, government as protector requires the ability to meet and treat with other governments as well as to fight them.

This minimalist view of government is clearly on display in the early days of the American Republic, comprised of the President, Congress, Supreme Court and departments of Treasury, War, State and Justice. Protect and provide.

The concept of government as provider comes next: government as provider of goods and services that individuals cannot provide individually for themselves. Government in this conception is the solution to collective action problems, the medium through which citizens create public goods that benefit everyone.

but that are also subject to free-rider problems without some collective compulsion. The basic economic infrastructure of human connectivity falls into this category: the means of physical travel, such as roads, bridges and ports of all kinds, and increasingly the means of virtual travel, such as broadband. All of this infrastructure can be, and typically initially is, provided by private entrepreneurs who see an opportunity to build a road, say, and charge users a toll, but the capital necessary is so great and the public benefit so obvious that ultimately the government takes over.

2] The Right to Strike is defined in the NLRA as

National Labor Relations Board, [The National Labor Relations Board (NLRB) is comprised of a team of professionals who work to assure fair labor practices and workplace democracy nationwide. Since its creation by Congress in 1935, this small, highly respected, independent Federal agency has had daily impact on the way America's companies, industries and unions conduct business. Agency staff members investigate and remedy unfair labor practices by unions and employers.], "NLRA and the Right to Strike," NLRA <https://www.nlr.gov/about-nlr/b/rights-we-protect/your-rights/nlra-and-the-right-to-strike>

NLRA and the Right to Strike The Right to Strike. Section 7 of the Act states in part, "Employees shall have **the right. . . to engage in other concerted activities for the purpose of collective bargaining** or other mutual aid or protection." Strikes are included among the concerted activities protected for employees by this section. Section 13 also concerns the right to strike. It reads as follows: Nothing in this Act, except as specifically provided for herein, shall be construed so as either to interfere with or impede or diminish in any way the right to strike, or to affect the limitations or qualifications on that right. It is clear from a reading of these two **provisions** that: the law not only guarantees the right of employees to strike, but also **places limitations** and qualifications **on** the exercise of **that right.** **Lawful** and unlawful strikes. **The lawfulness of a strike may depend on the object, or purpose, of the strike, on its timing, or on the conduct of the strikers.** The object, or objects, of a strike and whether the objects are lawful are matters that are not always easy to determine. Such issues often have to be decided by the National Labor Relations Board. The consequences can be severe to striking employees and struck employers, involving as they do questions of reinstatement and backpay. Strikes for a lawful object. Employees who strike for a lawful object fall into two classes: economic strikers and unfair labor practice strikers. Both classes continue as employees, but unfair labor practice strikers have greater rights of reinstatement to their jobs. Economic strikers defined. If the object of a strike is to obtain from the employer some economic concession such as higher wages, shorter hours, or better working conditions, the striking employees are called **economic strikers.** **They retain their status as employees and cannot be discharged, but they can be replaced by their employer.** If the employer has hired bona fide permanent replacements who are filling the jobs of the economic strikers when the strikers apply unconditionally to go back to work, the strikers are not entitled to reinstatement at that time. However, if the strikers do not obtain regular and substantially equivalent employment, they are entitled to be recalled to jobs for which they are qualified when openings in such jobs occur if they, or their bargaining representative, have made an unconditional request for their reinstatement. Unfair labor practice strikers defined. Employees who strike to protest an unfair labor practice committed by their employer are called unfair labor practice strikers. **Such strikers can be neither discharged nor permanently replaced. When the strike ends, unfair labor practice strikers, absent serious misconduct on their part, are entitled to have their jobs back even if employees hired to do their work have to be discharged.** If the Board finds that economic strikers or unfair labor practice strikers who have made an unconditional request for reinstatement have been unlawfully denied reinstatement by their employer, the Board may award such strikers backpay starting at the time they should have been reinstated. **Strikes unlawful because of purpose.** A strike may be unlawful because an object, or purpose, of the strike is unlawful. **A strike in support of a union unfair labor practice**, or one that would cause an employer to commit an unfair labor practice, may be a strike for an unlawful object. **For example, it is an unfair labor practice for an employer to discharge an employee for failure to make certain lawful payments to the union when there is no union security agreement in effect** (Section 8(a)(3)). A strike to compel an employer to do this would be a strike for an unlawful object and, therefore, an unlawful strike. Furthermore, Section 8(b)(4) of the Act prohibits strikes for certain objects even though the objects are not necessarily unlawful if achieved by other means. An example of this would be a strike to compel Employer A to cease doing business with Employer B. It is not unlawful for Employer A voluntarily to stop doing business with Employer B, nor is it unlawful for a union merely to request that it do so. It is, however, unlawful for the union to strike with an object of forcing the employer to do so. In any event, **employees who participate in an unlawful strike may be discharged and are not entitled to reinstatement.** **Strikes unlawful because of timing—Effect of no-strike contract.** **A strike that violates a no-strike provision of a contract is not protected** by the Act, and the striking employees can be

discharged or otherwise disciplined, unless the strike is called to protest certain kinds of unfair labor practices committed by the employer. It should be noted that not all refusals to work are considered strikes and thus violations of no-strike provisions. **A walkout because of conditions abnormally dangerous to health, such as a defective ventilation system in a spray-painting shop, has been held not to violate a no-strike provision.** Same—Strikes at end of contract period.

Section 8(d) provides that when either party desires to terminate or change an existing contract, it must comply with certain conditions. If these requirements are not met, a strike to terminate or change a contract is unlawful and participating strikers lose their status as employees of the employer engaged in the labor dispute. If the strike was caused by the unfair labor practice of the employer, however, the strikers are classified as unfair labor practice strikers and their status is not affected by failure to follow the required procedure. **Strikes unlawful**

because of misconduct of strikers. Strikers who engage in serious misconduct in the course of a strike may be refused reinstatement to their former jobs. This applies to both economic strikers and unfair labor practice strikers. Serious misconduct has been held to include, among other things, violence and threats of violence. The U.S. Supreme Court has ruled that a “sitdown” strike, when employees simply stay in the plant and refuse to work, thus depriving the owner of property, is not protected by the law. Examples of serious misconduct that could cause the employees involved to lose their right to reinstatement are: • **Strikers physically blocking persons from entering or leaving a struck plant.** • Strikers threatening violence against nonstriking employees. • Strikers attacking management representatives.

3] Unconditional is defined as **not conditional or limited**
<https://www.merriam-webster.com/dictionary/unconditional>

Unconditional Right to Strike then implies that status quo conditions don't apply in the aff

4] Enforcement through IFAs solves credibility concerns and legal loopholes which encourages striking.

Neill 12 [Emily CM; “The Right to Strike: How the United States Reduces it to the Freedom to Strike and How International Framework Agreements can Redeem it,” 1/1/12; Labor & Employment Law Forum Volume 2 Issue 2 Article 6;

<https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1047&context=lelb>] Justin

IFAs **open the door to collective bargaining** by creating a space that **alters** the traditionally **antagonistic employer-employee** engagement and is more **hospitable** to the organizing process.⁸³ MNC commitment to **respect** the core ILO principles of **freedom of association** and the rights to **organize** and **collectively bargain** through IFAs are **instrumental to realizing that purpose**.⁸⁴

1. The **Creation and Proliferation of International Framework Agreements**

An **IFA is an agreement** negotiated between an MNC (Multinational Corporation) and typically⁸⁵ a **global union**⁸⁶ **to establish an ongoing relationship** between the signatories **and ensure adherence to** uniform **labor standards** by the MNC in all countries in which it operates.⁸⁷ **IFAs are** the first and

only **formally-negotiated instruments between unions and corporations at the global level** and a significant development in labor relations.⁸⁸ Since the signing of the first IFA in 1988, they have spread at a steadily increasing rate.⁸⁹ Their proliferation since 2000 has been especially dramatic—with the number of IFAs signed in 2003-2006 nearly doubling the number signed in the first fifteen years.⁹⁰ By 2008, approximately sixty-five agreements had been concluded.⁹¹ At the end of 2010, that number had jumped to seventy-six.⁹²

2. Context of Framework Agreements: Corporate Social Responsibility

While **both corporate codes of conduct and IFAs** can be traced to a **consumer driven push for corporate social responsibility**, a key difference separates the two: **credibility**. In the late 1980's, **MNCs in the United States began to respond to campaigns by non-governmental organizations accusing MNCs of international human rights abuses by elaborating internal codes of conduct.**⁹³ **These codes, unilaterally written and implemented, tend to be vague and provide for no enforcement mechanism.**⁹⁴ **The voluntary, self-enforcing nature of these commitments has led critics to conclude that they are mere marketing ploys lacking in credibility** or having any real social impact.⁹⁵

IFAs were developed, in part, as **an alternative to corporate codes of conduct to raise labor standards.**⁹⁶ Unlike unilateral codes, **IFAs are negotiated between the two principal actors—employers and workers—in the employment relationship.**⁹⁷ Involvement of the very party the agreement is meant to protect attaches greater meaning and significance to the instrument.⁹⁸

The purpose of IFAs is to **promote fundamental labor rights by regulating corporate conduct on a global level.**⁹⁹ This brings us to another **key distinction** between corporate codes of conduct and IFAs: **their concrete normative content.**

3. Core ILO Principles as the Substantive Content of IFAs

Whereas **codes tend to be vague in their commitments, MNCs commit themselves to concrete international labor norms through framework agreements.** The **key areas** of IFAs are the **acceptance of the four core labor standards**, as articulated in the 1998 ILO Declaration.¹⁰⁰ The Declaration itself is typically not mentioned, but rather the four rights are referred to in IFAs by their convention numbers.¹⁰¹ Thus, apart from a very few exceptions, IFAs refer explicitly to ILO Conventions 87 and 98 on freedom of association and the right to organize and collective bargaining, respectively.¹⁰²

As previously discussed, **ILO standards are the principal source of international labor norms.**¹⁰³ ILO **Conventions 87 and 98 are perhaps the most important of ILO principles since the right to organize and bargain collectively is essential to the defense of working conditions** like wages, hours, and health and safety **through the collective bargaining process.**¹⁰⁴

4. Scope of IFAs, MNCs and Supply Chains

One of the most important features of IFAs is their goal of addressing behavior not only within the signatory MNC, but along their supply chains as well.¹⁰⁵ According to one study, of the IFAs in existence as of 2008, eighty eight percent explicitly indicated that the norms of the agreements applied to their subsidiaries and seventy-three percent contained provisions defining their application to suppliers and subcontractors.¹⁰⁶ These provisions contain varying degrees of commitment on behalf of the signatory MNC. Some MNCs agree to place very concrete obligations on supply chain parties, going so far as to detail sanctions to be imposed upon non-compliant suppliers.¹⁰⁷ Others contain provisions that are less mandatory, limiting the MNC's obligation to informing or encouraging its suppliers and subsidiaries to respect the principles of the agreement. For instance, the PSA Peugeot Citroen IFA was amended in 2010, changing its once relatively firm language by which suppliers are "required" to make similar commitments to a much weaker provision in which the MNC agrees to "request" that its suppliers a similar commitment in respect of their own suppliers and sub-contractors.¹⁰⁸

III. ANALYSIS

The principal weapon workers have to leverage their bargaining power is the strike.¹⁰⁹ The permanent strike replacement policy renders [strikes] this weapon almost meaningless by subjecting workers that employ it to a risk of job loss. This practice deviates from international norms on freedom of association, the right to organize, and bargain collectively, as enunciated in Conventions 87 and 98, and reaffirmed in the ILO 1998 Declaration to the point of rendering the right to strike a mere freedom to strike.¹¹⁰ Fortunately, IFAs have the potential to bring many U.S. operating companies into compliance with international standards on the right to strike, which prohibits the use of permanent replacements.

This Section first addresses the effect of the permanent replacement doctrine on the right to strike in the United States. It next argues that as a member of the ILO, the U.S. is obligated to amend this policy to guarantee workers protection in their right to strike. Finally, it argues that even if the U.S. permits permanent strike replacements, certain U.S. companies are bound to IFAs that prohibit them from taking advantage of the policy.

A. Interference with the Right to Strike is an Abridgement of ILO Principles

Collective bargaining is the mechanism through which workers present their demands to an employer and, through negotiations, determine the working conditions and terms of employment.¹¹¹ The right to strike arises most often in the context of collective bargaining, though as a weapon of last resort.¹¹² The employment relationship is an economic one—with most workers' demands encompassing improved pay or other working conditions.¹¹³ To bring balance to the employment relationship at the bargaining table, one of the primary weapons available to workers in defending their interests is the threat of withholding labor to inflict costs upon the employer.¹¹⁴ The principle of the strike as a legitimate means of action taken by workers' organizations is widely recognized in countries throughout the world, almost to the point of universal recognition.¹¹⁵ The ILO Committee on Freedom of Association holds the position that the right to strike is a basic consequence of the right to organize.¹¹⁶

Interference or impairment of the right to strike is inconsistent with Articles 3, 8, and 10 of Convention 87 guaranteeing workers freedom of association and the right to take concerted actions to further their interests. Article 3 recognizes the right of workers' organizations to organize their activities and to formulate their programs.¹¹⁷ Article 10 states that the term "organization" means any organization for furthering and defending the interests of workers.¹¹⁸ When read together with Article 10, Article 3 protects activities and actions that are designed to further and defend the interests of workers. Recall that strikes are recognized as an essential means through which workers further and defend their interests.¹¹⁹ Article 8 declares that no national law may impair the guarantees of the Convention.¹²⁰ Because strike action falls under the activities protected by Article 3, which are aimed at furthering and defending workers' interests, limitations on the right to strike may contravene Conventions 87 and 98.¹²¹ This subsection addresses the lawful practice of hiring of permanent replacements for striking workers in the United States as it relates to ILO principles.

1. The Use of Permanent Strike Replacements Reduces the 'Right' to Strike to the Unprotected 'Freedom' to Strike

In refraining from ratifying ILO Conventions 87 and 98, the United States government has insisted that U.S. law sufficiently guarantees workers protections of the principles of freedom of association, the rights to organize, and bargain collectively.¹²² While Section 13 of the NLRA addresses the right to strike,¹²³ in reality, enforcement of the NLRA falls short of its goals and departs from international norms, which afford the right to strike fundamental status.¹²⁴ The Mackay doctrine, **permitting permanent replacement of strikers renders the right a mere privilege, or freedom, because it removes meaningful protection of the right by stripping employers of a duty to refrain from interference with striking.**¹²⁵ Wesley Hohfeld's famous account of legal rights provides a useful analytical framework for distinguishing between the colloquial uses of the "rights" and their implications.¹²⁶ Under this framework, **rights are distinguished from** what he calls **privileges, or freedoms, by the existence or inexistence of a corresponding duty.** All **rights have a corresponding duty, or a legal obligation to respect the legal interest of the right-holder and refrain from interfering** with it.¹²⁷ In the example of the right to strike, the correlative is the employer's duty to not interfere with the employees' right.¹²⁸ On the other hand, a 'freedom' is the liberty to act, but without the imposition of a duty upon others.¹²⁹ When one has the freedom to act, others simply do not have a right to prevent her from acting.¹³⁰ In the strike context, if employees enjoy the freedom to strike, an employer does not have the right to stop the employees from striking, but does not have a duty to not interfere with the act of striking.¹³¹

In establishing the Mackay permanent strike replacement Doctrine, the Supreme Court reasoned that the 'right' to strike does not destroy an employer's right to protect and continue business by filling the vacancies of the strikers.¹³² In so

holding, the Court actually transformed the ‘right’ to strike it into the ‘freedom’ to strike by removing a corresponding affirmative duty not to interfere with the exercise of the right from the employer.¹³³ The hire of permanent replacements interferes with strike action by inflicting substantial repercussions upon the employees that undertake the action, loss of employment opportunities.¹³⁴

The Mackay doctrine forces an employee to choose to **strike—at the risk of losing the very job** that is the object of the gains and benefits sought—**rendering the act virtually useless.**¹³⁵ **The threat of being permanently replaced has, in fact, discouraged workers from exercising their ‘right’ to strike.**¹³⁶

Application of the Mackay doctrine produces results that are inconsistent with the NLRA’s provisions regarding protected activity, making the diminution of protection for striking employees even more apparent. In recognizing an employer right to hire permanent replacements, the Mackay Court created a loophole for employers who otherwise are prohibited from firing striking employees under the Section 8(a)(3) of the NLRA, which proscribes retaliation against employees that engage in protected union activity.¹³⁷ While the act of permanently replacing strikers is lawful, firing strikers is unlawful, although both acts produce the same result: loss of a job as a consequence of striking.¹³⁸ The result renders the NLRA’s protections for striking workers a dead letter. Although employers have a duty to refrain from retaliation against workers engaged in union activity in the form of firing, employers do not have a duty to refrain from reaching the same result through a different tactic—permanent replacement.¹³⁹ Thus, this removal of a duty to refrain from interference renders the ‘right’ to strike, an unprotected ‘freedom’ to strike that yields to an employer’s corresponding freedom to replace strikers.¹⁴⁰ In other words, the Mackay doctrine preserves the NLRA Section 13 reference to strike action as a lawful recourse for workers, but not one afforded the status of a protected right.

Advantage - Chips

1] In the age of technology semiconductors chips are the new oil. It is the critical link for hegemonic influence.

Maire 10/7

Robert Maire, “*THE U.S.-CHINA BATTLE FOR DOMINANCE WILL BE DETERMINED BY THE VIRTUALLY INVISIBLE SEMICONDUCTOR CHIP*,” The Technology Letter, 10/7/21,

<https://www.thetechnologyletter.com/the-posts/the-us-china-battle-for-dominance-will-be-determined-by-the-virtually-invisible-semiconductor-chip>

Robert Maire, who has been working in the field of semiconductors for over twenty-five years. Robert is the last man standing in terms of writing with tremendous depth and breadth about the art of making computer chips. There is no one else communicating the issues of the industry with his level of expertise and perspective.

Much as atoms are the building blocks of matter, **semiconductors are the fundamental building blocks of the modern technology world.** Chips enable and compose the internet, computers, smart phones, transport, healthcare, finance, manufacturing, and all the world's data. **The ability to lead and control the design and manufacture of chips determines who dominates globally** in all of these areas, and new, yet unknown, applications. Wars today are won by information, command and control. He who has the best information and the ability to use it, wins. Intelligence gathering and analysis is increasingly based on technology assets and artificial intelligence rather than humans. That includes facial recognition, satellites, drones, data mining and encryption. **Advanced airplanes, ships, submarines and space operation are all dependent on advanced semiconductors for their war-fighting systems. Having the newest generation of AI chip will make the win/lose determination in a dogfight, code breaking, and data mining. The entire internet,** from optical cables to routers **and satellites, runs on semiconductors.** Today we are worried about an externally sourced hacking of the network, but what if the internet were hacked from the inside out by the very chips it is composed of? Nefariously changing a few transistors out of billions in a chip would be an attack against which one would be defenseless. **"It is critical for the US to regain leadership of the leading edge of chip technology."**

2] The Recent Chip shortages revealed that China is aggressively pursuing industrial dominance, while a dying US Chip Industry is hopelessly outsourced.

Maire 2

Robert Maire, "THE U.S.-CHINA BATTLE FOR DOMINANCE WILL BE DETERMINED BY THE VIRTUALLY INVISIBLE SEMICONDUCTOR CHIP," The Technology Letter, 10/7/21, <https://www.thetechnologyletter.com/the-posts/the-us-china-battle-for-dominance-will-be-determined-by-the-virtually-invisible-semiconductor-chip>

Robert Maire, who has been working in the field of semiconductors for over twenty-five years. Robert is the last man standing in terms of writing with tremendous depth and breadth about the art of making computer chips. There is no one else communicating the issues of the industry with his level of expertise and perspective.

All of today's advanced telecommunications chips are made in Taiwan, a short boat ride from China, which has aspirations to be dominant in semiconductors. While there is significant argument about control of 5G networks, the reality is that 5G does not work without advanced semiconductors. Control semiconductors and you control 5G by default, rendering the discussion moot. The old saying is, "Take away a man's fish and he'll go hungry for a day ... sell him a fishing pole and he'll never be hungry again." In that vein, **the U.S. government has, until recently, mistakenly focused on withholding chips from China's Huawei but has continued to**

sell China all the advanced equipment and know-how it needs to make its own advanced chips. China has redoubled its efforts to become independent and dominant in chips due to this flawed strategy. China remains both the biggest and fastest-growing market for chip-making technology in the world, outstripping U.S. spend by almost ten times. The flow of technology continues to China almost unimpeded from the U.S. as well as from its allies.

There are no more silicon “fabs” in Silicon Valley. Intel, one of the founding US chip companies, has ceded the technology race it started. “Moore’s Law,” named after one of its founders, Gordon Moore, to Taiwan Semiconductor Manufacturing, in Taiwan. Once unthinkable, Intel is now outsourcing manufacture to Taiwan Semi, with the only questions being how much and how fast. IBM’s semiconductor manufacturing, which used to provide “trusted” chip making to the U.S. defense industry, was sold long ago to Global Foundries, owned by Abu Dhabi. Critical

portions of that manufacturing have been moved offshore such that the U.S. no longer has leading-edge, trusted domestic chip-making capabilities. It is critical for the US to regain leadership of the leading edge of chip technology.

Unlike every other industry, only the chip industry follows the exponential curve of Moore’s Law in which performance doubles roughly every two years. That means that being a generation or two behind renders trailing chip technology uncompetitive and ineffective, both commercially and strategically, in everything from

telecommunications and computers to war fighting, intelligence, encryption and AI.

Imagine being a US car maker battling a foreign manufacturer whose cars were twice as fast, using half the gas, at half the cost with only a two-year lead. It is not the low labor cost advantage seen in other industries that has caused the U.S. to lose its lead to foreign competitors in semiconductors. Rather, the vast majority of the cost of manufacture of chips is the depreciation on a \$10 billion factory that has a leading-edge life of only a few years, which is obviously the same everywhere. Staying on the exponential Moore’s Law curve is very expensive, especially in a stock market that rewards “capital light” and outsourced companies. Falling off the technology curve has been self-inflicted. The recent IPO prospectus for Global Foundries shows just how difficult things have become: Amidst years of declining revenues, years of losses, deeply in debt, selling assets and trimming operations, it gave up on trying to keep up the Moore’s Law race with Taiwan Semi. Global is in a distant fourth place in total chip-making by volume produced, with roughly a tenth the business of Taiwan Semi, the industry leader, and no path to advancing critical technology. Both Intel and Global Foundries have made it clear they want a government handout. The \$52 billion proposed for “Chips for America” is a start, but small as compared to the well-over \$100 billion allocated by the Chinese

government to boost their chip industry, let alone the spending by Taiwan Semi. The chip industry and the government are in lock-step in China, with no such coordination in the U.S., not even in the critical defense industry. The US semiconductor industry needs more than just a handout, it needs fundamental change. The entire U.S. technology industry including Apple, Google, Facebook, Qualcomm, AMD, Nvidia and now even Intel is completely reliant on Taiwan, which China’s President Xi describes as a “run-away province,” which “must and will be re-united with China.” Taiwan likely appears to China much as Crimea appeared to Russia, only with a much more prized, highly strategic asset that could determine future technology dominance and thus global dominance. Again, the US response to that truly existential threat requires more than a simple economic handout to industry leaders with the hope that they will fix the issue. It requires fundamental change in the underlying factors and root causes that allowed

and drove the industry to move overseas. **That means both legislative and economic incentives as well as ensuring the human capital talent is available for long-term success.**

We were sharply reminded by a relatively minor shortage that semiconductors, like the invisible air we breathe, are a critical, pervasive resource that needs to be protected for the long term.

****China will take Taiwan soon 1ar EXT**

<https://www.theguardian.com/world/2021/oct/06/biden-says-he-and-chinas-xi-have-agreed-to-abide-by-taiwan-agreement>

3] There's a silver lining, In recognition of the issue, the Biden Administration has been leading bipartisan efforts to revitalize the industry.

Flatley 21

Daniel Flatley, "Senate China Bill to Add \$52 Billion for U.S. Chip Making," Bloomberg, 5/18/21
<https://www.bloomberg.com/news/articles/2021-05-18/china-bill-to-include-52-billion-for-u-s-chip-manufacturing>

I write about the intersection of politics, economics and foreign policy in Congress for Bloomberg News in Washington, D.C. In practical terms, this means I write a lot about sanctions, visas and arms sales. I occasionally write about veterans issues. I'm a former Marine and a West Virginia native. <https://www.linkedin.com/in/danielflatley>

The Senate will include \$52 billion to bolster domestic semiconductor manufacturing in a broader bill **to enhance U.S. competitiveness with China**, Senate Majority Leader Chuck Schumer said. Schumer on Tuesday called the move "a historic and immediate infusion of federal money" to restore U.S. manufacturing of semiconductors that are crucial to the automobile and electronics industries as well as the military. Among other things, **the legislation would** set up a program to give financial assistance to **build, expand, or modernize semiconductor** fabrication **plants in the U.S.** Funding to support the domestic semiconductor industry was authorized in 2021 defense policy bill, but it didn't actually provide the money. The addition to the China bill, which is based on legislation Schumer sponsored with Indiana Republican Senator Todd Young, would remedy that. "This is a very big deal," Schumer said. The addition of the funding to the broader legislation was key to moving toward passage of the measure, which Schumer wants to accomplish by the end of the month. Though additional changes may be made over the coming days, **it has broad support** in the chamber **with bipartisan fervor to counter China's challenge to U.S. economic primacy. President Joe Biden also has endorsed the bill.**

4] Empty Factories don't do anything, even if we have the political capital to reinvigorate US Semiconductors, we are facing drastic worker shortage.

Gitlin 9/23

Jonathan Gitlin, "Semiconductor firms can't find enough workers, worsening chip shortage," ArsTechnica, 9/23/21, <https://arstechnica.com/information-technology/2021/09/now-the-chip-shortage-is-being-exacerbated-by-a-labor-shortage/>

Jonathan received his BSc in Pharmacology from King's College London, and his PhD in Pharmacology from Imperial College London, and followed up with postdoctoral work at The Scripps Research Institute in La Jolla, CA, and the University of Kentucky in Lexington, KY, where he also taught International Science and Technology Policy at the Patterson School of Diplomacy and International Relations. It was during his postdoc years that he started writing for Ars Technica, covering the sciences with the occasional foray into racing games.

The semiconductor chip shortage that has so vexed the auto industry looks set to continue for quite some time, according to a new industry survey. More than half of the companies that were surveyed by IPC said they expected the shortage to last until at least the second half of 2022.

And **right now, the chip shortage is being exacerbated by rising costs and a shortage of workers. According to the survey, 80 percent of chip makers say that it's become hard to find workers who have to be specially trained to handle the highly toxic compounds used in semiconductor manufacturing. The problem is worse in North America and in Asia, where more companies are reporting rising labor costs compared to those in Europe. But only a third of Asian chip makers say they are finding it harder to find qualified workers, compared to 67 percent of North American companies and 63 percent of European companies. That may well explain why fewer Asian semiconductor companies (42 percent) are reporting increasing order backlogs, compared to 65 percent of North American and 60 percent of European companies.** Just

under half (46 percent) said they were retraining their current workers to fill the gaps, and nearly as many (44 percent) said they were increasing wages to make the jobs more attractive. Other popular measures include more flexible hours and more training opportunities for workers. Even more of the companies surveyed said that rising material costs were a problem, too—90 percent globally, with nearly as many suggesting that trend will continue for another six months at least. IPC says that chip makers' profit margins are shrinking as a result. That's probably already being felt by some of their customers. According to a report by AlixPartners, the auto industry will lose out on \$210 billion in revenue in 2021, forecasting a shortfall in production of 7.7 million vehicles worldwide. That's got the US government's attention, too. On Thursday, Commerce Secretary Gina Raimondo is meeting automakers and tech firms, as well as semiconductor companies, to see if the federal government can help.

5] That stems from a historical precedent of inflexibility towards collective bargaining and toxic conditions in the industry.

Bacon 11

David Bacon, "Up Against the Open Shop – the Hidden Story of Silicon Valley's High-Tech Workers," Truthout, 3/4/11, <https://truthout.org/articles/up-against-the-open-shop-the-hidden-story-of-silicon-valley-s-high-tech-workers-2/>

David Bacon worked at National Semiconductor for a number of years until he was fired in 1982. He was president of the UE Electronics Organizing Committee from 1978 to 1983 and was the lead UE organizer assigned to the Versatronex strike. David Bacon is a writer and photographer, and former union organizer. He is the author of several books on labor, migration and the global economy, including *In the Fields of the North / En los campos del norte*, *The Children of NAFTA*, *Communities Without Borders*, *Illegal People* and *The Right to Stay Home*. His photographs and stories can be found here and here.

Introduction On January 29, 1993, workers at the Versatronex plant in Sunnyvale, California, filed out of its doors for the last time. Seventeen years have passed since, but there are still electronics workers in Silicon Valley who remember the company's name. It was the first Valley plant struck by production employees and the first where a strike won recognition of their union. The struggle of these workers, almost all immigrants from Mexico, Central America and the Philippines, demolished some of the most cherished myths about the Silicon Valley workforce. It showed workers there are like workers everywhere. Under the right circumstances, even in the citadel of high tech's open shop, people are willing to organize for a better life. "We said at the beginning that if the company was going to close, let them close," said Sandra Gomez, a leader of the Versatronex strike. "But as long as the plant was open, we were going to fight for our rights."

Unions have called the electronics industry "unorganizable." Corporations like IBM, Hewlett-Packard, Intel and

National Semiconductor told their workers for years that the company regarded them as a family and that they needed no union.

Healthy bottom lines, they said, would guarantee rising living standards and secure jobs. Economists painted a picture of the electronics industry as a massive industrial engine fueling economic growth, benefiting workers and communities alike. **The promises were worthless.**

Today, many of those giants of the industry own no factories at all, having sold them to contract manufacturers that build computers and make chips in locations from China to Hungary. In the factories that remain in the Valley, labor contractors like Manpower have become the formal employers, relieving the big brands of any responsibility for the workers who make the products bearing their labels. **While living standards rise for a privileged elite at the**

top of the workforce, they've dropped for thousands of workers on the production

line. Tens of thousands of workers have been dropped off the lines entirely, as

production was moved out of the Valley to other states and countries. Companies long ago eliminated their no-layoff pledge. Permanent jobs became temporary and then

disappeared entirely. **The image of the clean industry was undermined by toxic**

contamination of the Valley's water supply and a high occurrence of chemically

induced industrial illness. Despite these obstacles, however, for three decades Silicon Valley was as much a cauldron of new

strategies for labor organizing as it was for corporate management of the workforce. **Workers developed important**

tactics to oppose inhuman conditions. Some unions, like the janitors, wielded those tactics with remarkable success.

For production workers in the plants themselves, however, the road was harder and

they often seemed to accept the industry's mythology that they either couldn't or

wouldn't organize. The Development of the High-Tech Workforce. One of the oldest myths about Silicon Valley is that its high-tech

innovations were the brainchildren of a few, brilliant white men, who started giant corporations in their garages. In fact, the basic inventions that form the foundation of the electronics industry, especially the solid-state transistor, were developed at Bell Laboratories, American Telephone and Telegraph, Fairchild Camera and Instrument and General Electric. These innovations were products of the cold war – of the race in arms and space that began after World War Two. Long before the appearance of the personal computer, high-tech industry grew fat on defense contracts and rising military budgets. Its cold war roots affected every aspect of the industry, from its attitude toward unions to the

structure of its plants and workforce. **As the electronics industry began to grow in the 1950s, a**

fratricidal struggle within the US labor movement led to the expulsion of many unions

and union members for their left-wing politics. One byproduct of that struggle was the

near destruction of the union founded to organize workers in the electrical industry –

the United Electrical, Radio and Machine Workers of America (UE). General Electric Corp. in

particular helped ensure the fragmentation of the electrical industry workforce among 13 different unions, with a great proportion outside any union at all. As a result, while the new high-tech industry was growing, the ability of electrical and electronics workers to organize unions in the

expanding plants fell to its lowest point since the early 1930s. **From the beginning, high-tech workers had to**

face an industry-wide anti-union policy. Robert Noyce, who participated in the invention of the transistor and later became a co-founder of Intel Corp., declared that “remaining non-union is an essential for survival for most of our companies. If we had the work rules that unionized companies have, we’d all go out of business. This is a very high priority for management here. We have to retain flexibility in operating our companies. The great hope for our nation is to avoid those deep, deep divisions between workers and management which can paralyze action.” **The expanding electronics plants were laboratories for developing personnel-management techniques for maintaining “a union-free environment.” Some of those techniques pioneered in Silicon Valley, like the team-concept method for controlling workers on the plant floor, were later used to weaken unions** in other industries, from auto manufacturing to steelmaking.

Another co-inventor of the transistor, William Shockley, won renown as a partisan of theories of the racial inferiority of African-Americans. As Shockley, Noyce, and others guided the development of the industry in Silicon Valley, they instituted policies that effectively segregated its workforce. In electronics plants, women were the overwhelming majority, while the engineering and management staff consisted overwhelmingly of men. Immigrants from Asian and Latin American countries were drawn to the Valley’s production lines. Engineering and management jobs went to white employees. **By the mid-1990s, Asian** workers made up 30 percent of the skilled production workforce, 47 percent of the semiskilled workforce and 41 percent of the unskilled workforce. **Latinos** constituted 18 percent of skilled workers, 21 percent of semiskilled workers and 36 percent of unskilled workers. Both groups together **were** only 17 percent of management employees and **25 percent of** professional and engineering **employees.** The same picture held true for women. While 23 percent of management employees were women and 29 percent of professionals, **women were 80 percent of clerical employees.** 40 percent of skilled workers, 60 percent of semiskilled workers and 50 percent of unskilled workers. The picture painted by these statistics is still largely accurate today. African-American workers were frozen out almost entirely. Although unemployment in the African-American communities of Oakland and East Palo Alto, within easy commuting distance of the plants, has remained at depression levels, African-Americans are not above 7.5 percent of the workforce in any category and below 3 percent in management and engineering. Karen Hossfeld, a sociologist at San Francisco State University, who has written extensively on the status of women in high-tech industry, explains the segregation as a conscious decision on the part of manufacturers. “Employers assume foreign-born women will be unlikely to agitate for pay hikes,” she says.

6] The status quo is insufficient, structural reform requires additional measures.

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It is extremely unlikely that high-tech companies, with their history of total hostility to unions, would ever agree to such measures without a virtual revolution in their workforce. Neither the AFL-CIO nor the Change to Win federation are likely to assign vast new resources to help organize that kind of social movement among workers in **the electronics industry** in Silicon Valley. Yet, Silicon Valley **is** the citadel, **the**

fortress of the country's most anti-union industry. Overcoming it has the same strategic importance that organizing the steel and auto industries in Pittsburgh and Detroit had in the great industrial union upsurge of the 1930s. **For the working class and communities of color in Silicon Valley to assert their own interests and to ensure that economic development meets their needs,** the workers in the Valley's plants must be organized. **High-tech industry dominates every aspect of life in Silicon Valley, and its voice is virtually unchallenged on questions of public policy because the workers who have created the Valley's fabulous wealth have no voice of their own. Strong, democratic, rank-and-file unions in the electronics plants can give them that voice and in the process change every aspect of political and economic life. The basic decisions on issues of living standards, job relocation, toxic pollution, housing, discrimination and economic development could then be made by the people those decisions affect the most, rather than by employers or public officials,** whether well-intentioned or not. In the 1920s, the steel and auto industries also seemed like insurmountable bastions that unions would never organize. And, yet, a decade later, as a result of a radical social movement based among workers themselves, they were organized in a matter of a few years. This is the challenge of Silicon Valley, the goal sought by its working people for three decades.

China + Econ Impacts

1) Chips are the critical link for hegemonic influence, neg concedes the race to China. Chinese heg would be worse than US heg.

Thayer 19

[Bradley A. Thayer, an associate professor in political science from Minnesota-Duluth, and an author, 4-14-2019, "Why America Must Maintain Ideological Dominance," National Interest, <https://nationalinterest.org/feature/why-america-must-maintain-ideological-dominance-52082>] AK

China is the single most formidable peer competitive threat faced by the United

States. It alone has the potential to replace the United States as the world's hegemon, an ambition the Soviets may have possessed but never could have achieved due to their weaknesses, particularly economically. We can foresee a future where China has the ability to force Washington to yield and cede its regional and global interests in favor of Beijing's. China's greater willingness to use coercion to advance its interests provides a window into that future, as its territorial expansion and militarization of the South China Sea illuminate. Whether the United States can remain the preeminent force for free and open societies in the face of a rising China is the defining element of international politics in the twenty-first century, and the most immediate U.S. national security policy interest. An understanding of the future of the Sino-American confrontation entails an understanding of why both China and the United States are motivated for conflict. Despite the importance of the issue, the nature and scope of the threat are still not fully grasped in America. However, there are three ways to understand Sino-American confrontation. First, there are the causes: the change in the balance of power in China's favor and the conflicting ideologies of the two states. Second, the United States leadership and the American people must understand "Why China Fights." That is, what the Chinese leadership want, and why they are willing to fight America. Third, Americans must grasp "Why the U.S. Fights," to maintain freedom and other liberal values and to preserve its dominant position, while comprehending the fundamental advantages Washington possesses. Illuminating the two conceptions of victory demonstrates the ultimate and irreconcilable gap in the visions for international politics between Washington and Beijing, and consequently why conflict—certainly cold, and very possibly hot—is inevitable. The Causes of the Sino-American Conflict: Shifting Balance of Power and Ideology From both the Chinese and American perspectives, two fundamental factors explain the source of the conflict. First, the Sino-American struggle is material—economic and military power matter, particularly the shifting balance of relative power from the United States to China. This shift feeds ambition in China and fear in Washington. Given its strongly nationalistic and ethnocentric beliefs, China as a rising hegemon

would challenge any dominant state—as it did the United States and the Soviet Union during the Cold War. It is of historical importance that this is the first time in its long history that China is a rising hegemon. In its past, it was the dominant state in Asia—the primary world it knew. Even after its defeat in the First Opium War, China maintained the pretension that it was still dominant until colonization by Europeans, Japanese, and Americans forced the abandonment of its pretensions. Now, for the first time in its history, China is the challenger to the dominant state. This is something new in the history of empires because the example of China shows you can be on top, lose it all, and return to greatness or even dominance. In historical context, this is a remarkably impressive feat—unmatched by any empire in history. Second, the cause of the struggle is also inherently ideological. Ideology illuminates what will be gained for the victor—the return of the Middle Kingdom or the triumph of freedom—and what will be lost for the defeated. It inspires the leadership and population of both sides. It also provides an understanding of the intensity of passion on the Chinese side—the hatred for America for hindering China's return to its rightful position and for Washington's arrogance. Beijing and Chinese citizens are also upset with Americans for not realizing its time is past, and so it must yield gracefully to the new hegemon. Yet so far, a concomitant level of strategic focus and passion is absent on the U.S. side. That needs to change. "Why China Fights:" The Return of the Middle Kingdom The Chinese seek confrontation in order to achieve their conception of victory—the return of the Middle Kingdom's suzerainty and the replacement of Washington by Beijing as the dominant power in international politics. This ambition is a natural one for the Chinese leadership and population, and is caused by their conception of China's place in the world. For the Chinese, or more particularly, the majority Han population, there is the supremacist belief that the Han are the greatest people, the creators of the most sophisticated polity, and to whom other peoples and states should be deferential. For Han-supremacists, it is right and proper that China dominates international politics because China was the most advanced, culturally refined, and humane civilization in history. Han-supremacy is anchored in millennia and is a core component of Chinese political culture. Consequently, it is a far deeper force than Communism or capitalism. Han culture is viewed as the epitome of civilized life and contains traditional values of industriousness, discipline, patriotism, love of the Han and their history. In essence, the Chinese seek a Warren Hardingesque "return to normalcy," where they resume their position as the epitome of civilization and the world's fountainhead of economic and political power. For its adherents, the United States is a malevolent force which seeks to prevent the natural and right order of international politics—Chinese hegemony—from returning. This perspective is not likely to change. Beijing will

fight the United States because it is the single major impediment to China's strategic objectives. **With America removed, there is no single power, or constellation of powers such as Australia, Japan, and India, that could prevent Beijing from achieving its aims, which Xi Jinping transparently and boldly advances in his conception of a hegemonic China by 2049.** The United States is the barrier to the realization of China's

ambitions and is its ideological opponent, and so it is the focus of China's enmity. "Why the U.S. Fights:" Preservation of Freedom **U.S. leadership seeks to maintain its position because** that is best, first, for U.S. security; second, the security of its allies; and third, for the promotion of its ideology.

America's ideological push is vital to ensure that freedom and democratic government, open societies, and free markets are the dominant values of international politics. In sum,

Washington fights for the international order it created after World War II, and which it expanded after the Cold War. America seeks to maintain the status quo, its position and the order it has known, and that both Washington and the American people expect to continue. That expectation was conceived and conditioned in the calm geopolitical seas of the 1990s and 2000s. That time is past. As China has risen, Washington must now battle to maintain its place in the world and the dominance of its military, economy, ideology, and technological leadership. Indeed,

America is forced to fight to defend its position, allies, and values. But this cannot be wholly a defensive war, **the United States must actively confront China in each realm, and put China on the back foot in order to ensure the United States and its allies triumph in each aspect of the competition.** While the military and economic

components are essential, ideology is their equal. Ideology is critical for Washington as it motivates the U.S. response to China with a comprehension, energy, and vigor that material forces cannot. As the U.S. Navy historically contends: "ships don't fight, men do." People fight to defend their country and ideology. Accordingly, the value of the ideology of the United States is the spine that supports U.S. power. U.S. ideology unifies and inspires the American people, as well as ideological sympathizers around the world, and explains why China's ideology and vision for

the world should be resisted. In explaining "Why We Fight," **the United States must contrast its dynamic, innovative, free, and open society, with the wealthy and increasingly prosperous, but ethnocentric, racist, and closed society of the Chinese** The West went through a Civil Rights Movement to create cultures of

anti-racism throughout their societies. In China, the idea of a Civil Rights Movement that would aid the condition of women and minorities, and so undermine Han-supremacy, is unthinkable.

That stark recognition captures the profound differences between the two societies. **Equally importantly, U.S. ideology may serve to undermine the legitimacy of the authoritarian rule of the Communist Party of China** in the

minds of the Chinese people. Ideology also provides Washington with key advantages. **As a free and open society, the United States is a better ally for states in Africa, Asia, and Latin America, than China, whose alliances are frequently characterized by abuse of its erstwhile ally's people and resources.** In contrast

to China, U.S. decision-making is transparent to allies, it is a dynamic and inclusive society, and has a long history of protecting the interests of its allies, and treating them as equal partners. America's free and open political principles make the United States a more valuable and dependable ally. Moreover, as U.S. power declines relative to China's, Washington is likely to depend more on ideology than economic and military power. Consequently, the United States will have to depend more on its allies and other cooperative states, in Europe, Asia, and Africa. This situation plays to the United States' ideological strength and is a great advantage for Washington. China seeks resources globally, offering infrastructure development and foreign direct investment to the many states willing to partner, if not yet align, with it. Thus far, the United States has chosen not to match China's ability in these categories, but it does—hands down—far exceed China's ability to inspire the people of the world. Furthermore, while the interests of its allies are varied, U.S. ideology serves as the cement for alignment against China, particularly for states in Africa, Asia. This is true even in Europe, where economic interest might cause an alliance with China or neutrality in the face of an intensifying Sino-American conflict. The United States cannot fight this struggle alone and the good news is that it need not. The ideology of the United States allows it to maintain relations with Asia-Pacific and European states based on

common interests and political principles. But the struggle does require U.S. leadership. **China's conception of victory is deeply**

disturbing, disagreeable, and dangerous for stability: the Middle Kingdom returned to dominance, with all other states in a subordinate position. "Why China Fights" is for Han-supremacy. "Why the U.S. Fights" is to preserve a future free and open, and to prevent the hegemony of a great power governed by a nation-based supremacist ideology.

The Sino-American conflict will determine whether the security and position of Washington are maintained, and freedom and open societies remain the dominant ideal in international politics. Or whether America will lose, and freedom is supplanted by authoritarianism and Han-supremacism.

2] We can't settle for second, Chinese hegemonic influence puts us in a dangerous power that goes nuclear.

Min-hyung **Kim 19**. Department of Political Science and International Relations, Kyung Hee University, Seoul, South Korea. "A real driver of US–China trade conflict: The Sino–US competition for global hegemony and its implications for the future" Emerald Insight. 02-04-2019.

<https://www.emerald.com/insight/content/doi/10.1108/ITPD-02-2019-003/full/html> // Re-Cut Justin

Underlying these arguments for an inevitable war between the two superpowers is PTT. PTT originally formulated by Organski (1958) posits that **war is**

likely when the power of the dominant state in the international system (i.e. **hegemon**) is

declining and that **a dissatisfied rising challenger substantially reduces the power gap**

between the hegemon and itself. Unlike balance of power theory, PTT argues that the war is most likely when there is near power parity between a dominant state and a rising and dissatisfied challenger

(Organski and Kugler, 1980, pp. 19-20)[5]. **A rising power here is generally dissatisfied with the existing international**

order and initiates war against a declining hegemon in order to impose orders that are more favorable

to itself (Organski 1958, pp. 364-367). Layne (2018, p. 110) put these power transition dynamics quite succinctly as follows: "Over time, however, the relative power of states changes, and eventually the international order no longer reflects the actual distribution of power between or among the leading Great Powers.

When that happens, **the legitimacy of the prevailing order is called into question, and it will be challenged by the**

rising power(s)." And **when the balance of power between a dominant state and a rising challenger changes**

sufficiently, a new order replaces an old one typically by a hegemonic war (2018, p. 104). **Paying close attention**

to the growing Sino–US competition over hegemony in the twenty-first century, therefore, Shirk (2007, p. 4), China specialist,

argues that **"History teaches us that rising powers are likely to provoke war."** On the other hand, scholars like Gilpin

(1981) contend that the **power transition war between great powers is likely to occur when a hegemonic state**

whose power is declining due to imperial overstretch[6] **views "preventive war as the most attractive means of eliminating**

the threat posed by challengers" (Ned Lebow and Valentino, 2009, p. 391), although they do acknowledge that there might be some "ways to

prolong the period of its power preponderance vis-à-vis the rising challenger, so that the rapidly rising power will not dare to challenge the hegemonic leadership"

(Kim and Gates, 2015, p. 221). In this case, the initiator of war is a declining hegemon, rather than a rising challenger. **The declining hegemon who**

fears a rising challenger's overtaking its power in the near future sees war as a better option than other

options of maintaining its hegemony such as reducing its commitments abroad and appeasing a rising challenger.

3] Extinction

(Henricksen 17), emeritus senior fellow at the Hoover Institution (Thomas, "Post-American World Order," *Hoover Institution*, <http://www.hoover.org/research/post-american-world-order>)

The **tensions stoked by** the **assertive regimes in** the Kremlin or **Tiananmen Square could spark a political or military incident** that might set off a chain reaction **leading to a large-scale war**. Historically, powerful rivalries nearly always lead to at least skirmishes, if not a full-blown war. **The anomalous Cold War era spared** the United States and Soviet Russia a **direct conflict**, largely from concerns that one **would trigger a nuclear exchange destroying** both states and much of **the world**. Such a repetition might **reoccur in the unfolding three-cornered geopolitical world**. It seems safe to acknowledge that an ascendant China and a resurgent Russia will persist in their geo-strategic ambitions. 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.

4] American leadership & hard power is key to dollar hegemony which is vital for the global economy.

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(Christopher Smart, 12-16-2018, "The Future of the Dollar—and Its Role in Financial Diplomacy," Carnegie Endowment for International Peace, <https://carnegieendowment.org/2018/12/16/future-of-dollar-and-its-role-in-financial-diplomacy-pub-77986>)

Smart has spent the past three decades engaged in key issues of global economic affairs and foreign policy from the collapse of the Soviet Union to the European financial crisis to the 21st century challenges around global data flows. Currently, Smart is the head of macroeconomics and geopolitical research at Barings. From 2013 to 2015 he was the special assistant to the president at the National Economic Council and the National Security Council, where he was a principal adviser to President Obama on trade, investment, and a wide range of global economic issues. Prior to that, he spent four years as deputy assistant secretary of the treasury, where he led the Obama administration's response to the euro crisis and designed U.S. engagement on financial policy across Europe, Russia, and Central Asia.

The dollar's central role in world financial markets reflects both faith in American leadership and the absence of reasonable alternatives. Currency dominance has also been a linchpin in America's efforts to shape a global order around free markets and democracy while serving as a foundation for the sustained growth of a more integrated global economy.

These roles now face rising risks. Both Republicans and Democrats question the benefits of an open and integrated economic order that seems to drain good jobs and demand repeated bailouts of bad banks and corrupt foreign governments. Meanwhile, allies and rivals alike raise doubts about the durability of U.S. leadership and the wisdom of depending so heavily on one dominant power. Such talk hardly portends imminent financial collapse or reconfiguration of the global order. America's military and political strength remain paramount and investors still retreat to dollars whenever risks mount—even when those risks originate in the United States itself. Nevertheless, signs of an unravelling consensus are unmistakable. They lie not in the declining percentages of U.S. currency held in sovereign reserves, but rather the weakening faith in America's ability to hold the system together. The clues are in the early elements of financial plumbing that bypass dollar markets, international financial institutions

without active U.S. participation and increasingly rudderless economic gatherings of finance ministers. **The risks for the existing global order are not that another power will displace Washington on these issues, but that there will be no leadership in areas that have become increasingly important to global commerce.**

Worse, the response to the next financial crisis will be uncoordinated and disastrous.

The U.S. midterm elections have triggered some renewed debate about America's global agenda, yet there have been few voices to remind voters that international financial leadership benefits Americans and not just America's banks. In fact, global dependence on access to the dollar gives Washington leverage to coordinate battles against terrorism and cybercrime, to shape rules against corruption and tax avoidance, and to protect privacy through the regulation of global data flows that will drive the next decades of economic innovation. Meanwhile, the United States must also build on summit communiqués to make concrete progress in these areas with skeptical allies and rivals. For all its fits and starts, **U.S. leadership continues to provide a crucial global**

framework for strong, sustainable and balanced growth. Yet faith in the dollar will only endure with a sense that the United States' role has evolved from chief executive to managing partner that champions the integrity of a global financial system along with its own interests. The fundamental choice to transact, invest or save in dollars reflects a judgement that they are most useful for those purposes. These judgements are slow and cumulative, but the choices can shift surprisingly and decisively. In many ways, the dollar emerged later than it should have, but perhaps sooner than expected. The U.S. economy surpassed Britain's in the 1870s and was a larger exporter by the First World War. Yet the dollar first gained preeminence in bond markets by 1929, only to cede leadership back to sterling with the Great Depression. The end of the Second World War left the United States

paramount with victorious armed forces, an unmatched economy and a network of global interests. In the decades since then, however, the dollar has endured the end of gold convertibility, inflationary fevers, expanding trade gaps, ballooning fiscal deficits, intermittent government shutdowns, a global financial crisis and even the loss of the U.S. Triple-A bond rating. Foreign firms use dollars because their customers, suppliers and competitors do.

In one survey by Harvard economics professor Gita Gopinath, now the International Monetary Fund's (IMF) chief economist, the share of global trade invoiced in dollars is more than three times the U.S. share of global exports. Foreign governments accumulate dollars in reserves because they like to manage their own exchange rate against the world's major trading currency. According to the IMF, the dollar still represents roughly 62 percent of all sovereign reserves, with the euro at 20 percent and the renminbi still accounting for less than 2 percent even though its share in global trade and finance is rising. Finally, investors favor dollars in part because firms and governments do, but also because the dollar markets are the deepest and most sophisticated, which makes them likely to be less expensive to tap for loans and more likely to deliver a reliable return. The economic tradeoffs for the United States are clear. Issuing the world's reserve currency offers the prospect to literally print money everyone accepts to buy guns without giving up butter. The dollar's dominance also allows the United States to delay or shift any costs of global adjustment to other countries. Another benefit, the United States pockets the "seigniorage" income from what are effectively no-interest loans from the foreigners who hold two-thirds of the \$100 bills in circulation. Among the costs, America's easy access to low-cost credit may contribute to a stronger exchange rate that hurts exports and makes fiscal and trade deficits larger. Washington also bears responsibility to provide dollars and safe assets in a crisis. Some of the dollar's durability comes from the absence of viable alternatives. Europe's common currency was a political project to bind the continent after centuries of war, although a clear aspiration of some European leaders has been to create a counterweight to dollar dominance. Yet the European financial crisis fragmented its financial markets and triggered questions about the viability of the European project itself. Postwar Japan deliberately protected the yen from an international role so that domestic capital could be directed for domestic purposes and the exchange rate could be managed. More recently, Japanese economic woes and competition from China have proscribed any real role for the yen, which remains at roughly 4.5 percent of international reserves. Chinese officials have a clear aim to expand the role of the renminbi in global trade, finance and sovereign reserves. For example, foreign

governments have issued debt and central banks have established swap lines in Chinese currency. Even the likes of Germany and Chile have added it to the mix of their global reserves. Yet for now the reach of China's currency remains restricted. Even if there is no economic crisis that interrupts more than two decades of blistering growth and reforms open the capital account and exchange rate, China's domestic financial markets are not deep or liquid enough to absorb vast global flows. Ultimately, these require fundamental reforms in corporate governance, regulatory transparency and a system of checks and balances that a government can trust. Even the nineteenth century Rothschilds preferred lending money to constitutional monarchs, whom they considered better credit risks than unconstrained absolute monarchs. "Great powers have great currencies," wrote the Nobel Laureate Robert Mundell, and it seems uncontroversial that global influence and global money are intertwined. Indeed, if the military strength and economic wealth of the United States underpin the dollar's central role, America's global influence is enhanced because its currency dominates trade, finance and sovereign reserves. In the extreme, the United States has been known to leverage its military strength on behalf of economic interests—and indeed, the dollar itself. At different times, for example, Japan, Germany and Saudi Arabia have been reminded that U.S. security guarantees warranted their financial support when the dollar came under strain. Alternatively, during the Suez Crisis, the dollar's dominance allowed the United States to force a British military withdrawal under threat of triggering a run on sterling. Yet much of *the dollar's influence stems directly from the prestige of America's institutions* and trust in its intentions. Military and economic power support the dollar's dominant share of trade and investment, but faith in U.S. political institutions has bolstered its role as both a reserve currency and a safe haven. In a world of imperfect choices, other countries have come to rely on the U.S. record of building rules-based financial institutions, proposing agendas for policy coordination and shaping progress toward open markets. This has been the story of the postwar Bretton Woods institutions, U.S. engagement in debt relief negotiations and the response to financial crises. Meanwhile, currency power ultimately depends on trust in the intentions of the issuer. The issuer's interests may naturally come first, but its usage will grow if these interests are essentially aligned with shared goals of global growth and stability. The most important economic conferences of the twentieth century convened military and political allies for difficult negotiations around monetary and financial policy. How much more difficult will these discussions become with strategic rivals around the table? How eager will China or Russia be to cooperate when the G20 leaders next convene to address a global crisis? The United States put its own interests first long before the Trump administration, but it has generally interpreted this to include the construction of global financial rules and institutions that apply to all. The growing concerns among allies and rivals are the doubts of bank customers who have been told that all fees have been raised because management needs to prioritize shareholders first. The statement may be technically correct, but it's a questionable business strategy. At a moment when other economic powers continue to emerge, these agreed rules and shared constraints become all the more important to protect U.S. interests. Amid accelerating political and technological change, they become more valuable still.

5] Collapse of dollar heg causes global currency devaluation

Sharma 19.

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When the US dollar strengthens and weakens in response to buying and selling in the global currency markets, foreign countries do not protest. Occasionally, they have cooperated with the United States to stabilise the greenback. But nothing will destroy trust in American financial leadership, and the benefits that go with it, more surely than for the United States government to start unilaterally manipulating the US dollar for its own competitive advantage. If Vietnam or South Korea manipulate their currencies in a bid to improve their exports, a few of their trade partners may retaliate; if the financial superpower plays the same game, the whole world will respond strongly,

because the US dollar is the international standard. A record high 60 percent of countries now measure, or "anchor", the value of their own currencies against the US dollar. Any campaign to devalue the world's anchor could set off a destructive wave of competitive devaluations. After World War I, when America challenged Britain as the leading global empire, the US dollar began to gain on sterling as the currency that most central banks preferred to hold in reserve. Reserve currency status had long been a perk of imperial might - and an economic elixir. By generating a steady flow of customers who want to hold the currency, often in the form of government bonds, it allows the privileged country to borrow cheaply abroad and fund a lifestyle well beyond its means. Other countries watched the United States assume this role with dismay. In the 1960s, Valéry Giscard d'Estaing, then finance minister and later president of France, called the US dollar's powerful status America's "exorbitant privilege". And for nearly a century this privilege has helped to keep United States interest rates low, making it possible for Americans to buy cars and homes and - in recent decades - run large government deficits that they could not otherwise afford.

6] Next crash will cause a laundry list of impacts results in extinction

Lu 18

[Qian Lu, Managing Director, Greater China, The Economist Group. "The next economic crisis could cause global conflict. Here's why." November 13, 2018. <https://www.weforum.org/agenda/2018/11/the-next-economic-crisis-could-cause-a-global-conflict-heres-why>]

The response to the 2008 economic crisis has relied far too much on monetary stimulus, in the form of quantitative easing and near-zero (or even negative) interest rates, and included far too little structural reform. This means that the next crisis could come soon – and pave the way for a large-scale military conflict. The next economic crisis is closer than you think. But what you should really worry about is what comes after: in the current social, political, and technological landscape, a prolonged economic crisis, combined with rising income inequality, could well escalate into a major global military conflict. The 2008-09 global financial crisis almost bankrupted governments and caused systemic collapse. Policymakers managed to pull the global economy back from the brink, using massive monetary stimulus, including quantitative easing and near-zero (or even negative) interest rates. But monetary stimulus is like an adrenaline shot to jump-start an arrested heart; it can revive the patient, but it does nothing to cure the disease. Treating a sick economy requires structural reforms, which can cover everything from financial and labor markets to tax systems, fertility patterns, and education policies. Policymakers have utterly failed to pursue such reforms, despite promising to do so. Instead, they have remained preoccupied with politics. From Italy to Germany, forming and sustaining governments now seems to take more time than actual governing. And Greece, for example, has relied on money from international creditors to keep its head (barely) above water, rather than genuinely reforming its pension system or improving its business environment. The lack of structural reform has meant that the unprecedented excess liquidity that central banks injected into their economies was not allocated to its most efficient uses. Instead, it raised global asset prices to levels even higher than those prevailing before 2008. In the United States, housing prices are now 8% higher than they were at the peak of the property bubble in 2006, according to the property website Zillow. The price-to-earnings (CAPE) ratio, which measures whether stock-market prices are within a reasonable range, is now higher than it was both in 2008 and at the start of the Great Depression in 1929. As monetary tightening reveals the vulnerabilities in the real economy, the collapse of asset-price bubbles will trigger another economic crisis – one that could be even more severe than the last, because we have built up a tolerance to our strongest macroeconomic medications. A decade of regular adrenaline shots, in the form of ultra-low interest rates and unconventional monetary policies, has severely depleted their power to stabilize and stimulate the economy. If history is any guide, the consequences of this mistake could extend far

beyond the economy. According to Harvard's Benjamin Friedman, **prolonged periods of economic distress have been characterized also by public antipathy toward minority groups or foreign countries** – attitudes **that** can help to **fuel unrest, terrorism, or even war**. For example, during the Great Depression, US President Herbert Hoover signed the 1930 Smoot-Hawley Tariff Act, intended to protect American workers and farmers from foreign competition. **In the subsequent five years, global trade shrank by two-thirds. Within a decade, World War II had begun.** To be sure, WWII, like World War I, was caused by a multitude of factors; there is no standard path to war. But there is reason to believe that **high levels of inequality can play a significant role in stoking conflict**. According to research by the economist Thomas Piketty, **a spike in income inequality is often followed by a great crisis. Income inequality then declines for a while, before rising again, until a new peak – and a new disaster.** Though causality has yet to be proven, given the limited number of data points, this correlation should not be taken lightly, especially with wealth and income inequality at historically high levels. **This is all the more worrying in view of the numerous other factors stoking social unrest and diplomatic tension, including technological disruption, a record-breaking migration crisis, anxiety over globalization, political polarization, and rising nationalism.** All are symptoms of failed policies that **could** turn out to **be trigger points for a future crisis.** Voters have good reason to be frustrated, but the emotionally appealing populists to whom they are increasingly giving their support are offering ill-advised solutions that will only make matters worse. For example, despite the world's unprecedented interconnectedness, **multilateralism is increasingly being eschewed, as countries** – most notably, Donald Trump's US – **pursue unilateral, isolationist policies.** Meanwhile, **proxy wars are raging in Syria and Yemen.** Against this background, **we must take seriously the possibility that the next economic crisis could lead to a large-scale military confrontation.** By the logic of the political scientist Samuel Huntington, considering such a scenario could help us avoid it, because it would force us to take action. In this case, the key will be for policymakers to pursue the structural reforms that they have long promised, while replacing finger-pointing and antagonism with a sensible and respectful global dialogue. **The alternative may well be global conflagration.**

Solvency

1] A right to strike is crucial to negotiating favorable conditions for worker empowerment and unionization.

Myall 19

James Myall, MECEP's lead on the inclusive economy, including research on labor issues, gender and racial equity, and health care policy. James conducts research and impact analyses, writes educational materials, and collaborates with partners. He is skilled in data collection, research, and statistical and policy analysis. He studied public policy and management at the University of Southern Maine and holds a master's degree in ancient history and archaeology from the University of St. Andrews in Scotland. 4-17-2019, "Right to strike would level the playing field for public workers, with benefits for all of us," MECEP,

<https://www.mecep.org/blog/right-to-strike-would-level-the-playing-field-for-public-workers-with-benefits-for-all-of-us/>, 10-26-2021//Aanya

The right to strike would enable fairer negotiations between public workers and the government. All of us have reason to support that outcome.

Research shows that union negotiations set the bar for working conditions with other employers.

And as the largest employer in Maine, the state's treatment of its workers has a big impact on working conditions in the

private sector. **Unions support a fairer economy.** Periods of **high union membership** are **associated with lower levels of income inequality**, both nationally and in Maine. **Strong unions**, including public-sector

unions, **have a critical role to** play in **rebuilding a strong middle class.** Source: MECEP analysis of U.S. Centers for Medicare & Medicaid Services, National Health Expenditure Survey data (spending by state of residence, 1991-2014). Adjusted for inflation using the Consumer Price Index, and for population using the U.S. Census Bureau's population estimates. 2018 spending estimate from Maine

Health Data Organization. **Unions help combat inequities** within work places. Women and people of color in unions **face**

less wage discrimination than those in nonunion workplaces. On average, wages for nonunionized white women in Maine are 18 percent less than of those of white men. Among unionized workers, that inequality shrinks to just 9 percent. Similarly, women of color earn 26 percent less than men in nonunionized jobs; for unionized women of color, the wage gap shrinks to 17 percent.[i] All of us have a stake in the

success of collective bargaining. But **a union without the right to strike loses much of its negotiating power. The right to withdraw your labor is the foundation of collective worker action.**

When state employees or teachers are sitting across the negotiating table from their employers, **how much leverage do they really have when they can be made to work without a contract?** It's like negotiating the price of a car when the salesman knows you're going to have to buy it — whatever the final price is. **Research confirms** that public-sector **unions are less**

effective without the right to strike. Public **employees with a right to strike earn between 2 percent and 5 percent more** than those without it.[ii] While that's a meaningful increase for those workers, it also **should assuage any**

fears that a right to **strike would** lead to excessive pay increases or employees abusing their new right. LD 900, "An Act to Expand the Rights of Public Employees Under the Maine Labor Laws," ensures that Maine's public-sector workers will have the same collective bargaining rights as other employees in Maine. The bill would **strengthen the ability** of Maine's public-sector workers

to negotiate, resulting in higher wages, a more level playing field, and a fairer economy for all of us.

2] Increased union power translates to greater worker retention, less turnover and more productivity. Revitalizes the semiconductor industry by solving shortages.

Voos 09

Dr. Paula Voos, "How Unions can Help Restore the Middle Class," EPI, March 10, 2009,

https://files.epi.org/page/-/pdf/20090310_voos_efca_testimony.pdf

Professor Voos is a public member of the New Jersey's Public Employment Relations Commission. She is a past president of the Labor and Employment Relations Association and the editor of that Association's 1994 research volume, Contemporary Collective Bargaining in the United States. She has served on the Ford – United Autoworkers Voluntary Employee Benefit Association's Board of Trustees, on NJ's Benefits Review Task Force in 2005, and on the federal Commission on the Future of Worker-Management Relations (the Dunlop Commission) in 1994. She came to Rutgers from the University of Wisconsin in 1998, where she directed the Industrial Relations Research Institute.

<https://smlr.rutgers.edu/faculty-staff/paula-b-voos>

The Long-run Impact on American Competitiveness. **A crucial question is whether in an increasingly global economy, U.S. economic competitiveness would be hurt by an increase in union representation. Contrary to the conventional wisdom, there is little reason for fear in this regard.** First, most parts of the world, including all of the high-end economies with which we compete, have much higher levels of unionization than we do. Those high-end economies also pay higher benefits to their blue-collar workers. Of the 20 richest countries tracked by the U.S. Bureau of Labor Statistics, the United States ranks 17th in hourly pay for production workers in manufacturing. This group of trading partners accounts for almost half of total U.S. trade flows (Bivens, 2009). The key difference in competitiveness is not unionization; it is that we burden our businesses, especially our largest corporations, with the high cost of health insurance, whose cost is spread across society in other high-end economies, and the disadvantage of an overvalued currency. In fact, high rates of unionization are associated with smaller trade deficits, a good measure of international competitiveness (Bivens 2009). Second, **low labor costs are never going to be a reliable basis for U.S. competitiveness in a global economy – rather, the U.S. needs to compete on the basis of innovation, high value added, high quality, and high productivity. Unionization tends to promote the shift to these latter bases of competition by foreclosing the low-wage alternative.** Unions increase productivity through a variety of channels. **They reduce turnover and, hence, firm-specific skills are retained.** One benefit is that turnover costs are lowered for employers. Moreover, **the lower turnover makes it economically rational for employers to provide more training to union-represented employees, increasing employee skills and productivity further.** In addition, since unions increase compensation, firms are incentivized to invest in new technology (which tends to be labor-saving), increasing productivity. Unionized employers also tend to shift to higher value-added goods and services in their product mix. And in sectors in which there are union-supported apprenticeship programs, employers can take advantage of this source of highly skilled labor. Research on this topic indicates that there is substantial variation in the “union productivity effect.” The effect is much larger where there is a good relationship between labor and management, whereas in high-conflict situations, there is little likelihood that unions enhance productivity (Belman 1992). Strikes, of course, are particularly deleterious. Hence it is important that public policy not only makes it possible for workers to organize should they so desire, but also that the federal government provides a path to unionization that reduces conflict and gets the labor management relationship off to a good start. 6 In fact, this was part of the reasoning behind the National Labor Relations Act when it was passed in 1935. Section 1 of that Act, quoted earlier, speaks about the need to protect commerce “from injury, impairment, or interruption...by encouraging practices fundamental to the friendly adjustment of industrial disputes arising out of differences as to wages, hours, or other working conditions, and by restoring equality of bargaining power between employees and employers.” The idea in 1935 was that if employers were legally required to recognize and bargain with their employees’ chosen representatives, recognition strikes would be unnecessary and contentious disputes over wage and working conditions would be channeled into the collective bargaining process, to the benefit of all. **Unfortunately, because of a series of changes in the interpretation of the law over time,** employers are now able to insist that before collective bargaining can commence, employees must prove their support for their chosen bargaining representative through an election process that **is so conflict-laden that it fails to fulfill the purpose of getting collective bargaining relationships off to a constructive beginning.** The waiting period prior to an NLRB representation election creates a period of counterproductive labor-management strife that increases workplace tension and undoubtedly hurts workplace productivity. Even when employees win the right to representation through an election, they are often unable to negotiate a first contract. This occurs because the strike is the dispute resolution procedure when the parties are unable to agree on a contract. American workers often don’t want to strike, and yet they often cannot get a first contract without a successful strike. The entire representation election process is still extremely conflict-laden and is ripe for reform. The proposed Employee Free Choice Act is one option that shows particular promise to lessen labor-management conflict during the unionization stage. In short, we can be competitive while allowing American employees to exercise their rights to form a union. To do so, we need a way for workers who want union representation to organize in a less conflict-laden way and to initiate a constructive labor-management relationship.

CC -

1] The US leads the world in GHGs emitted per capita, it is imperative to cut down

Irfan 19

Umair Irfan, "Why the US bears the most responsibility for climate change, in one chart," Vox, Dec 4 2019, <https://www.vox.com/energy-and-environment/2019/4/24/18512804/climate-change-united-states-china-emissions>

Umair Irfan covers climate change, energy, and Covid-19 vaccine development for Vox. He is also a contributor to Science Friday. Before joining Vox, Umair was a reporter for ClimateWire at E&E News in Washington, DC, where he covered health and climate change, science, and energy policy.

Carbon dioxide emissions reached a record high in 2019, according to a report published Wednesday by the Global Carbon Project. The report also found that the rate of emissions growth is slowing down among some of the world's largest emitters. But **climate change is a cumulative problem, a function of the total amount of greenhouse gases that have accumulated in the sky**. Some of the heat-trapping gases in the air right now date back to the Industrial Revolution. And since that time, some countries have pumped out vastly more carbon dioxide than others. Back in April, the wonderful folks at Carbon Brief put together a great visual of how different countries have contributed to climate change since 1750. The animation shows the cumulative carbon dioxide emissions of the top emitters and how they've changed over time. Take a look: What's abundantly clear is that **the United States of America is the all-time biggest, baddest greenhouse gas emitter on the planet**. That's true, despite recent gains in energy efficiency and cuts in emissions. These **relatively small steps now cannot offset more than a century of reckless emissions** that have built up in the atmosphere. Much more drastic steps are now needed to slow climate change. And **as the top cumulative emitter, the US bears a greater imperative for curbing its carbon dioxide output and a greater moral responsibility for the impacts of global warming**. Yet the US is now the only country aiming to withdraw from the Paris climate agreement. China now emits more than the US, and India's emissions are rapidly rising. But these countries have a much smaller share of cumulative global emissions. Their populations are also much bigger than the US and other wealthier countries, so the amount that India and China emit per person is vastly smaller than the United States or the United Kingdom. Here are some takeaways from this animation: 1) **Cumulative emissions are the critical factor behind the warming we're experiencing. It's not the rate of our output of heat-trapping gases that changes the global climate; the total amount of carbon dioxide emitted is a critical factor** as well. While atmospheric carbon is gradually absorbed by the ocean and plants, a large fraction, about 20 percent, lingers for millennia. That means a big chunk of the greenhouse gases emitted at the dawn of the Industrial Revolution is still heating up our planet today. If we were to magically cease emitting all greenhouse gases at once, the planet would likely continue warming for a period of time. This leads to the next point. 2) The US has an outsized role in global warming, despite recent progress. When it comes to total greenhouse gas emissions, the US does a behind-the-back, through-the-legs, backboard-breaking dunk over China and the Soviet Union. In other words, the largest share of global greenhouse gases emitted since the Industrial Revolution comes from the US. And with great emissions comes great responsibility to mitigate climate change. And yes, the US has already made some of the largest cuts to its greenhouse gas emissions of any country in the world. Between 2005 and 2015, US emissions fell 11.5 percent, largely due to switching to less carbon-intensive fuels like natural gas. However, **US energy consumption hit a record high last year, and emissions are on the rise again after years of decline**. 3) Carbon intensity matters more than population for cumulative emissions. The graph also shows us that the worst greenhouse gas emitters of all time aren't the most populous countries. Instead, most of the chart toppers are the largest economic powers. You can see the United Kingdom drop down the rankings as its empire disintegrated over the years, losing an economic grip on the world, for example. That should teach us something about the most populated countries in the world today: India and China. **China and India do contribute a large and**

growing share of global emissions — which absolutely needs to be slowed down and reversed — but most of the warming we're seeing now is due to the emissions of wealthier countries like the United States.

China emits more carbon dioxide than the United States, but it emits less per person. Union of

Concerned Scientists

And remember the total emissions rate from both China and India has to be divided by more than a billion to yield an apt comparison to countries like the United States. In 2015, the US emitted 15.53 metric tons of carbon dioxide per capita. China emitted 6.59 metric tons. India emitted just 1.58 metric tons. As these countries get richer, their per capita emissions are poised to

rise further. This is why **technology transfer** from wealthier countries to less developed economies **is shaping up to be a critical**

component of fighting climate change. But ultimately the largest share of the burden in cleaning up this mess should fall to those who played the largest role in creating it. This animation leaves no doubt as to the culprits.

2] Independently, Sustained technological capabilities, which comes from better chips, are vital. Aff uniquely solves.

Lambertini 18

Marco Lambertini, *"Technology can help us save the planet. But more than anything, we must learn to value nature,"* World Economic Forum, August 23 2018 <https://www.weforum.org/agenda/2018/08/here-s-how-technology-can-help-us-save-the-planet/>

With over 25 years of global conservation leadership experience, works with world leaders, corporate executives and civil society to forge a future in which people and nature thrive. As Director-General of WWF International, heads one of the world's largest and most respected conservation organizations and represents WWF wherever action on the environment is required.

Technology is fundamentally changing the way we live, work, relate to one another and to the external world. The speed, breadth and depth of current breakthroughs has no historical precedent and is disrupting almost every sector in every country. Now more than ever, **the advent of new technology has the potential to**

transform environmental protection. The hunt for new smarter ways to support our development has always been a key driver of technological

advancement. Today **as our civilisation faces a new unprecedented challenge,**

technology can play a crucial role in decoupling development and

environmental degradation. Let's be clear. No human technology can fully replace 'nature's technology' perfected over hundreds of millions of years in delivering key services to sustain life on Earth. A productive, diverse natural world, and a stable climate have been the foundation of the success of our civilization, and will continue to be so in future. A fundamental issue in previous technological revolutions has been the lightness with which we have taken for granted healthy natural systems like forests, oceans, river basins (all underpinned and maintained by biodiversity) rather

than valuing these as a necessary condition to development. **We consume more natural resources than the planet**

can regenerate On 1 August, the world hit Earth Overshoot Day, the point in our calendars when we tip into consuming more natural resources than the planet can regenerate in a year.

Global Footprint Network, an international non-profit that calculates how we are managing — or failing to manage — the world's resources, says that in the first seven months of 2018 we devoured a year's worth of resources, such as water, to produce everything from the food on our plates to the clothes we're wearing — a new unwanted record. At present, we are using resources and ecosystem services as though we

had 1.7 Earths, and **such an ecological overshoot is possible only for a limited time**

before ecosystems begin to degrade and, ultimately, **collapse. As global biodiversity continues to**

decline steeply, the health and functioning of crucial ecosystems like forests, the ocean,

rivers and wetlands **will be affected. Coupled with climate change impacts** which are evident in warnings from

scientists **and the increasing frequency and intensity of extreme weather events**

worldwide; this is going to be disastrous for the ecological balance of the

planet and for our survival. Earth Overshoot Day is a stark reminder of the urgent actions individuals, countries and the global community must take to protect

forests, oceans, wildlife and freshwater resources and help achieve resilience and sustainable development for all. **We have a critical window of**

opportunity between now and 2020 **to put in place commitments and**

actions to **reverse the trend of nature loss** by 2030 and help ensure the health and well-being of people and our planet.

This is not just doom and gloom, the risk is real. The failing of natural systems is not without consequences for us. Every day new evidence of our unsustainable impact on the environment is emerging. The last five years have been the warmest five-year period on record, the Arctic warmed much faster than predicted and the UN estimates that in the last 10 years, climate-related disasters have caused \$1.4 trillion worth of damage worldwide. In just over 40 years, the world has witnessed 60% decline in wildlife across land, sea and freshwater and is heading towards a shocking decline of two-thirds by 2020 if current trends continue. This has happened in less than a generation. A blink of the eye, compared to the hundreds of millions of years some of these species have lived on our planet. Forests are under pressure like never before with unabated deforestation and at sea, 90% of the world's fish stocks are overfished. All indicators point toward our planet being on the brink. Why does this matter? It matters because we will not build a stable, prosperous and equitable future on a depleted planet. The 'battle of

technologies' It is time to focus on the solutions which we know exist or have the potential to be developed and this is where **technology**, along with behavioural change, **can help us reboot the health of our nature and planet.**

From the high seas to the depths of the world's most dense forests, **technology can transform how we identify, measure, track and value the many services and resources nature provides us with.**

Blockchain to revolutionize the commodity markets. Earlier this year, ^{WWF in} **Australia, Fiji and New Zealand joined forces to stamp out illegal fishing and slave labour in the tuna fishing industry using blockchain technology.**

"From bait to plate", the advances in blockchain technology can help consumers track the entire journey of their tuna – and potentially other agricultural commodities and fish – revolutionizing systems of certification and traceability. We can also use satellite data and cost-effective GPS tracking devices to 'see' and understand global fishing and global vessel traffic. Remote sensing in planning and monitoring On land as well, **remote sensing** plays an important role in planning, monitoring, and evaluating impact on the ground. It

has enabled WWF to monitor the developments of extractive industries in socially and ecologically-sensitive areas, including World Heritage sites. We're also partnering with NASA's Jet Propulsion Lab (JPL) and

UCLA to develop **an algorithm** that **enables the detection of deforestation from palm oil expansion**

using remote sensing data, and we're exploring the potential to expand this technology to other commodities. Drones and crowdsourcing help monitor forest health and detect illegal logging. Protecting the world's forests means ensuring land—in the right places—is protected or restored as well as healthy, providing people and wildlife what they need to survive, like clean air and water, food and jobs. And that's where drones come into play, acting as our eyes on the forest. And it's not just WWF that is using this technology. WRI (World Research Institute) has developed Global Forest Watch (GFW), an online forest monitoring and alert system that uses crowdsourcing, to allow anyone to create custom maps, analyse forest trends, subscribe to alerts, or download data for their local area or the entire world. Thermal imaging to combat poaching Every night, park rangers patrol the pitch-black savanna of Kenya's Maasai Mara National Reserve. They search for armed poachers who spill across the border from

Tanzania to hunt for bush meat and ivory. For years the number of poachers overwhelmed the relatively small cadre of rangers. Technology is now helping to turn the tide. **Thermal imaging video cameras enable rangers to catch poachers at record rates and deter many more from even making the attempt.**

Beyond direct interventions to stop poaching, WWF also uses technology to go after wildlife traffickers. To that end, we're working with a **coalition** of leading e-commerce and social media giants in the US and China to root out the sale of illicit wildlife products on their platforms. AI to track wildlife It is hard to think of technology and nature together but even advances like Artificial Intelligence (AI) that could not be further removed from the natural world are helping conservation

efforts. In China, **WWF and tech giant Intel** are harnessing the power of **AI** to **help protect** wild tigers and their **habitats, while also protecting countless other species as a result while helping carbon storage, vital watersheds and communities in the area.**

An engaged public is critical As we engage new partners and pursue novel applications of technology, we believe an informed and engaged public is critical to this work and we are constantly looking to make people aware of the challenges facing our planet and what we're doing to solve them. In 2016, we partnered with Apple to create an **Apps for Earth** campaign that raised \$8 million and educated millions of people around the world about core conservation issues. More recently, we leveraged Apple's augmented reality tools to launch the "**WWF Free Rivers**" app that invites people to experience the importance of free-flowing rivers for nature and for humans, and demonstrates how ill-conceived economic development endangers them both. The possibilities for technology partnerships to reboot nature are endless. Our challenge now is to scale this work beyond a few test sites and into all of the places we are working to protect the planet. More than technology, we need a fundamental shift in mindset and understanding of the role that nature and biodiversity plays in our lives and businesses. If we continue to produce, consume and power our lives the way we do right now, forests, oceans and weather systems will be overwhelmed and collapse. Unsustainable agriculture, fisheries, infrastructure projects, mining and energy are leading to unprecedented biodiversity loss and habitat degradation, over-exploitation, pollution and climate change. While their impacts are increasingly evident in the natural world, the consequences on people are real too. From food and water scarcity to the quality of the air we breathe, the evidence has never been clearer. We are however, in many instances, failing to make the link. Alongside the technological revolution, what we need is an equally unprecedented cultural revolution in the way we connect with the planet.

3] Climate Change Causes Extinction

Specktor 19

[Brandon writes about the science of everyday life for Live Science, and previously for Reader's Digest magazine, where he served as an editor for five years] 6-4-2019, "Human Civilization Will Crumble by 2050 If We Don't Stop Climate Change Now, New Paper Claims," livescience, <https://www.livescience.com/65633-climate-change-dooms-humans-by-2050.html> Justin

The current climate crisis, they say, is larger and more complex than any humans have ever dealt with before. **General climate models** — like the one that the

United Nations' Panel on Climate Change (IPCC) used in 2018 to predict that a global temperature increase of 3.6 degrees Fahrenheit (2 degrees Celsius) could

put hundreds of millions of people at risk — fail to account for the sheer complexity of Earth's many interlinked geological processes, as such, they fail to adequately predict the scale of the potential consequences. The truth, the authors wrote, is probably far worse than any models can fathom. How the world ends What might an accurate worst-case picture of the planet's climate-addled future actually look like, then? The authors provide one particularly grim scenario that begins with world governments "politely ignoring" the advice of scientists and the will of the public to decarbonize the economy (finding alternative energy sources), resulting in a global temperature increase 5.4 F (3 C) by the year 2050. At this point, the world's ice sheets vanish; brutal droughts kill many of the trees in the Amazon rainforest (removing one of the world's largest carbon offsets); and the planet plunges into a feedback loop of ever-hotter, ever-deadlier conditions. Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of lethal heat conditions, beyond the threshold of human survivability." the authors hypothesized. Meanwhile, droughts, floods and wildfires regularly ravage the land. Nearly one-third of the world's land surface turns to desert. Entire ecosystems collapse, beginning with the planet's coral reefs, the rainforest and the Arctic ice sheets. The world's tropics are hit hardest by these new climate extremes, destroying the region's agriculture and turning more than 1 billion people into refugees. This mass movement of refugees — coupled with shrinking coastlines and severe drops in food and water availability — begin to stress the fabric of the world's largest nations, including the United States. Armed conflicts over resources, perhaps culminating in nuclear war, are likely. The result, according to the new paper, is "outright chaos" and perhaps "the end of human global civilization as we know it."

Framework

1] Morality is based on response to problems in the world, which justifies focus on resolving material conditions of violence.

Gregory Fernando **Pappas 16** [Texas A&M University] "The Pragmatists' Approach to Injustice", The Pluralist Volume 11, Number 1, Spring 2016,

In Experience and Nature, Dewey names the empirical way of doing philosophy the "denotative method" (LW 1:371).¹⁸ What Dewey means by "denotation" is simply the phase of an empirical inquiry where we are concerned with designating, as free from theoretical presuppositions as possible, the concrete problem (subject matter) for which we can provide different and even competing descriptions and theories. Thus an empirical inquiry about an injustice must begin with a rough and tentative designation of where the injustices from within the broader context of our everyday life and activities are. Once we designate the subject matter, we then engage in the inquiry itself, including diagnosis, possibly even constructing theories and developing concepts. Of course, that is not the end of the inquiry. We must then take the results of that inquiry "as a path pointing and leading back to something in primary experience" (LW 1:17). This looping back is essential, and it never ends as long as there are new experiences of injustice that may require a revision of our theories. Injustices are events suffered by concrete people at a particular time and in a situation. We need to start by pointing out and describing these problematic experiences instead of starting with a theoretical account or diagnosis of them. Dewey is concerned with the consequences of not following the methodological advice to distinguish designation from diagnosis. Definitions, theoretical criteria, and diagnosis can be useful; they have their proper place and function once inquiry is on its way, but if stressed too much at the start of inquiry, they can blind us to aspects of concrete problems that escape our theoretical lenses. We must attempt to pretheoretically designate the subject matter, that is, to "point" in a certain direction, even with a vague or crude description of the problem. But, for philosophers, this task is not easy because, for instance, we are

often too prone to interpret the particular problem in a way that verifies our most cherished theories of injustice. One must be careful to designate the subject matter in such a way as not to slant the question in favor of one's theory or theoretical preconceptions. A philosopher must make an honest effort to designate the injustices based on what is experienced as such because a concrete social problem (e.g., injustice) is independent and neutral with respect to the different possible competing diagnoses or theories about its causes. Otherwise, there is no way to test or adjudicate between competing accounts.¶ That designation precedes diagnosis is true of any inquiry that claims to be empirical. To start with the diagnosis is to not start with the problem. The problem is pretheoretical or preinquiry, not in any mysterious sense but in that it is first suffered by someone in a particular context. Otherwise, the diagnosis about the causes of the problem has nothing to be about, and the inquiry cannot even be initiated. In his *Logic*, Dewey lays out the pattern of all empirical inquiries (LW 12). All inquiries start with what he calls an "indeterminate situation," prior even to a "problematic situation." Here is a sketch of the process:¶ Indeterminate situation → problematic situation → diagnosis: What is the problem? What is the solution? (operations of analysis, ideas, observations, clarification, formulating and testing hypothesis, reasoning, etc.) → final judgment (resolution: determinate situation)¶ To make more clear or vivid the difference of the starting point between Anderson and Dewey, we can use the example (or analogy) of medical practice, one that they both use to make their points.¹⁹ The doctor's starting point is the experience of a particular illness of a particular patient, that is, the concrete and unique embodied patient experiencing a disruption or problematic change in his life. "The patient having something the matter with him is antecedent; but being ill (having the experience of illness) is not the same as being an object of knowledge."²⁰ The problem becomes an object of knowledge once the doctor engages in a certain interaction with the patient, analysis, and testing that leads to a diagnosis. For Dewey, "diagnosis" occurs when the doctor is already engaged in operations of experimental observation in which he is already narrowing the field of relevant evidence, concerned with the correlation between the nature of the problem and possible solutions. Dewey explains the process: "A physician . . . is called by a patient. His original material of experience is thereby provided. This experienced object sets the problem of inquiry. . . . He calls upon his store of knowledge to suggest ideas that may aid him in reaching a judgment as to the nature of the trouble and its proper treatment."²¹ Just as with the doctor, empirical inquirers about injustice must return to the concrete problem for testing, and should never forget that their conceptual abstractions and general knowledge are just means to ameliorate what is particular, context-bound, and unique. In reaching a diagnosis, the doctor, of course, relies on all of his background knowledge about diseases and evidence, but a good doctor never forgets the individuality of the particular problem (patient and illness).¶ The physician in diagnosing a case of disease deals with something individualized. He draws upon a store of general principles of physiology, etc., already at his command. Without this store of conceptual material he is helpless. But he does not attempt to reduce the case to an exact specimen of certain laws of physiology and pathology, or do away with its unique individuality. Rather he uses general statements as aids to direct his observation of the particular case, so as to discover what it is like. They function as intellectual tools or instrumentalities. (LW 4:166)¶ Dewey uses the example of the doctor to emphasize the radical contextualism and particularism of his view. The good doctor never forgets that this patient and "this ill is just the specific ill that it is. It never is an exact duplicate of anything else."²² Similarly, the empirical philosopher in her inquiry about an injustice brings forth general knowledge or expertise to an inquiry into the causes of an injustice. She relies on sociology and history as well as knowledge of different forms of injustice, but it is all in the service of inquiry about the singularity of each injustice suffered in a situation.¶ The correction or refinement that I am making to Anderson's characterization of the pragmatists' approach is not a minor terminological or scholarly point; it has methodological and practical consequences in how we approach an injustice. The distinction between the diagnosis and the problem (the illness, the injustice) is an important functional distinction that must be kept in inquiry because it keeps us alert to the provisional and hypothetical aspect of any diagnosis. **To rectify or improve any diagnosis, we must return to the concrete problem;** as with the patient, this may require attending as much as possible to the uniqueness of the problem. This is in the same spirit as Anderson's preference for an empirical inquiry that tries to "capture all of the expressive harms" in situations of injustice. But this requires that we begin with and return to concrete experiences of injustice and not by starting with a diagnosis of the causes of injustice provided by studies in the social sciences, as in (5) above. For instance, a diagnosis of causes that are due to systematic, structural features of society or the world disregards aspects of the concrete experiences of injustice that are not systematic and structural.¶ **Making problematic situations of injustice our explicit methodological commitment as a starting point** rather than a diagnosis of the problem **is an important and useful imperative for nonideal theories. It functions as a directive to inquirers toward the problem, to locate it, and designate it before venturing into descriptions, diagnosis, analysis, clarifications, hypotheses, and reasoning about the problem.** These operations are instrumental to its amelioration and must ultimately return (be tested) by the problem that sparked the inquiry. The directive can make inquirers more attentive to the complex ways in which such differences as race, culture, class, or gender intersect in a problem of injustice. Sensitivity to complexity and difference in matters of injustice is not easy; it is a very demanding methodological prescription because it means that no matter how confident we may feel about applying solutions designed to ameliorate systematic evil, **our cures should try to address** as much as possible **the unique circumstances** of each injustice. The analogy with medical inquiry

and practice is useful in making this point, since the hope is that someday we will improve our tools of inquiry to practice a much more personalized medicine than we do today, that is, provide a diagnosis and a solution specific to each patient.

2] Our Framework comes lexically prior to any other: Threats to bodily security and life preclude the ability for moral actors to effectively utilize other moral theories since they are in a constant state of crisis that inhibit the ideal moral conditions which other theories presuppose – my fw comes first and my offense outweighs theirs under their framework.

4] We win precision- Governments have a unique responsibility for consequences.

Enoch 07 – David. “Intending, Foreseeing, and the State” The Hebrew University in Jerusalem, 9-13-2007. Published by: Legal Theory.

The general difficulty of the intending-foreseeing distinction here stemmed, you will recall, from the feeling that attempting to pick and choose among the foreseen consequences of one’s actions those one is more and those one is less responsible for looks more like the preparation of a defense than like a genuine attempt to determine what is to be done. Hiding behind the intending-foreseeing distinction seems like an attempt to evade responsibility, and so thinking about the distinction in terms of responsibility serves to reduce even further the plausibility of attributing to it intrinsic moral significance.

This consideration—however weighty in general—seems to me very weighty when applied to state action and to the decisions of state officials. For perhaps it may be argued that individuals are not required to undertake a global perspective, one that equally takes into account all foreseen consequences of their actions. Perhaps, in other words, individuals are entitled to (roughly) settle for having a good will, and beyond that let chips fall where they may. But this is precisely what stateswomen and statesmen—and certainly states—are not entitled to settle for.⁴⁴ In making policy decisions, it is precisely the global (or at least statewide, or nationwide, or something of this sort) perspective that must be undertaken. Perhaps, for instance, an individual doctor is entitled to give her patient a scarce drug without thinking about tomorrow’s patients (I say “perhaps” because I am genuinely not sure about this), but surely when a state committee tries to formulate rules for the allocation of scarce medical drugs and treatments, it cannot hide behind the intending-foreseeing distinction, arguing that if it allows⁴⁵ the doctor to give the drug to today’s patient, the death of tomorrow’s patient is merely foreseen and not intended. When making a policy-decision, this is clearly unacceptable.

Or think about it this way (I follow Daryl Levinson here):⁴⁶ perhaps restrictions on the responsibility of individuals are justified because individuals are autonomous, because much of the value in their lives comes from personal pursuits and relationships that are possible only if their responsibility for what goes on in the (more impersonal) world is restricted. But none of this is true of states and governments. They have no special relationships and pursuits, no personal interests, no autonomous lives to lead in anything like the sense in which these ideas are plausible when applied to individuals

persons. So there is no reason to restrict the responsibility of states in anything like the way the responsibility of individuals is arguably restricted.⁴⁷

States and state officials have much more comprehensive responsibilities than individuals do. Hiding behind the intending-foreseeing distinction thus more clearly constitutes an evasion of responsibility in the case of the former. So the evading-responsibility worry has much more force against the intending-foreseeing distinction when applied to state action than elsewhere.

5] Scenario analysis valuable- it enhances creativity, deconstructs epistemic biases and teaches advocacy skills

Barma et al 16 – (May 2016, [Advance Publication Online on 11/6/15], Naazneen Barma, PhD in Political Science from UC-Berkeley, Assistant Professor of National Security Affairs at the Naval Postgraduate School, Brent Durbin, PhD in Political Science from UC-Berkeley, Professor of Government at Smith College, Eric Lorber, JD from UPenn and PhD in Political Science from Duke, Gibson, Dunn & Crutcher, Rachel Whitlark, PhD in Political Science from GWU, Post-Doctoral Research Fellow with the Project on Managing the Atom and International Security Program within the Belfer Center for Science and International Affairs at Harvard, “‘Imagine a World in Which’: Using Scenarios in Political Science,” *International Studies Perspectives* 17 (2), pp. 1-19, http://www.naazneenbarma.com/uploads/2/9/6/9/29695681/using_scenarios_in_political_science_isp_2015.pdf)

What Are Scenarios and Why Use Them in Political Science? **Scenario analysis** is perceived most commonly as a technique for examining the robustness of strategy. It can immerse decision makers in future states that go beyond conventional extrapolations of current trends, preparing them to take advantage of unexpected opportunities and to protect themselves from adverse exogenous shocks. The global petroleum company

Shell, a pioneer of the technique, characterizes scenario analysis as the art of considering “what if” questions about possible future worlds. Scenario analysis **is thus typically seen as serving** the

purposes of corporate planning or as a **policy** tool to be used in combination with simulations of decision making. **Yet** scenario analysis **is not** inherently **limited to** these uses. **This** section provides a brief overview of the practice of scenario analysis and the motivations underpinning its uses. It then makes a case for the utility of the technique for political science scholarship and describes how the scenarios deployed at NEFPC

were created. The Art of Scenario Analysis We characterize scenario analysis as the art of **juxtaposing current trends** in unexpected combinations in order **to** articulate

surprising and **yet plausible** futures, often referred to as **“alternative worlds.”** Scenarios are thus explicitly not forecasts or projections based on linear extrapolations of contemporary patterns, and they are not hypothesis-based expert predictions. Nor should they be equated with simulations, which are best characterized as functional representations of real institutions or decision-making processes (Asal 2005). Instead, they are depictions of possible future states of the world, offered together with a narrative of the driving causal forces and potential exogenous shocks that could lead to those futures. Good scenarios thus rely on explicit causal propositions that, independent of one another, are plausible—yet, when combined, suggest surprising and sometimes controversial future worlds. For example, few predicted the dramatic fall in oil prices toward the end of 2014. Yet independent driving forces, such as the shale gas revolution in the United States, China’s slowing economic growth, and declining conflict in major Middle Eastern oil producers such as Libya, were all recognized secular trends that—combined with OPEC’s decision not to take concerted action as prices began to decline—came together in an unexpected way. While scenario analysis played a role in war gaming and strategic planning during the Cold War, the real antecedents of the contemporary practice are found in corporate futures studies of the late 1960s and early 1970s (Raskin et al. 2005). Scenario analysis was essentially initiated at Royal Dutch Shell in 1965, with the realization that the usual forecasting techniques and models were not capturing the rapidly changing environment in which the company operated (Wack 1985; Schwartz 1991). In particular, it had become evident that straight-line extrapolations of past global trends were inadequate for anticipating the evolving business environment. Shell-style scenario planning “helped break the habit, ingrained in most corporate planning, of assuming that the future will look much like the present” (Wilkinson and Kupers 2013, 4). Using scenario thinking, Shell anticipated the possibility of two Arab-induced oil shocks in the 1970s and hence was able to position itself for major disruptions in the global petroleum sector. Building on its corporate roots, scenario analysis has become a standard policymaking tool. For example, the Project on Forward Engagement advocates linking systematic foresight, which it defines as the disciplined analysis of alternative futures, to planning and feedback loops to better equip the United States to meet contemporary governance challenges (Fuert 2011). Another prominent application of scenario thinking is found in the National Intelligence Council’s series of Global Trends reports, issued every four years to aid policymakers in anticipating and planning for future challenges. These reports present a handful of “alternative worlds” approximately twenty years into the future, carefully constructed on the basis of emerging global trends, risks, and opportunities, and intended to stimulate thinking about geopolitical change and its effects.⁴ As with corporate scenario analysis, the technique can be used in foreign policymaking for long-range general planning purposes as well as for anticipating and coping with more narrow and immediate challenges. An example of the

latter is the German Marshall Fund’s EuroFutures project, which uses four scenarios to map the potential consequences of the Euro-area financial crisis (German Marshall Fund 2013). **Several features make scenario analysis** particularly **useful** for policymaking.⁵ Long-term global trends across a number of different realms—social, technological, environmental, economic, and political—combine in

often-unexpected ways to produce unforeseen challenges. Yet **the ability of decision makers to imagine** let alone prepare for, discontinuities in the policy realm

is constrained by their **existing mental models and** maps. This limitation is exacerbated by well-known **cognitive bias**

tendencies, such as groupthink and confirmation bias (Jervis 1976; Janis 1982; Tetlock 2005). The power of **scenarios** lies in their ability to **help individuals break**

out of conventional modes of thinking and analysis by introducing unusual combinations of trends and deliberate discontinuities in narratives about the future.

Imagining alternative future worlds through a structured analytical process enables policymakers to **envision and thereby adapt to something** altogether

different from the known **present**. Designing Scenarios for Political Science Inquiry The characteristics of scenario analysis that commend its use to policymakers also make it well suited to helping political scientists generate and develop policy-relevant research programs. Scenarios are essentially textured, plausible, and relevant stories that help us imagine how the future political-economic world could be different from the past in a manner that highlights policy challenges and opportunities. For example, terrorist organizations are a known threat that have captured the attention of the policy community, yet our responses to them tend to be linear and reactive. Scenarios that explore how seemingly unrelated vectors of change—the rise of a new peer competitor in the East that diverts strategic attention, volatile commodity prices that empower and disempower various state and nonstate actors in surprising ways, and the destabilizing effects of climate change or infectious disease pandemics—can be useful for illuminating the nature and limits of the terrorist threat in ways that may be missed by a narrower focus on recognized states and groups. By illuminating the potential strategic significance of specific and yet poorly understood opportunities and threats, scenario analysis helps to identify crucial gaps in our collective understanding of global political-economic trends and dynamics. The notion of “exogeneity”—so prevalent in social science scholarship—applies to models of reality, not to reality itself. Very simply, scenario analysis can throw into sharp relief often-overlooked yet pressing questions in international affairs that demand focused investigation. Scenarios thus offer, in principle, an innovative tool for developing a political science research agenda. In practice, achieving this objective requires careful tailoring of the approach. The specific scenario analysis technique we outline below was designed and refined to provide a structured experiential process for generating problem-based research questions with contemporary international policy relevance.⁶ The first step in the process of creating the scenario set described here was to identify important causal forces in contemporary global affairs. Consensus was not the goal; on the contrary, some of these causal statements represented competing theories about global change (e.g., a resurgence of the nation-state vs. border-evading globalizing forces). A major principle underpinning the transformation of these causal drivers into possible future worlds was to “simplify, then exaggerate” them, before fleshing out the emerging story with more details.⁷ Thus, the contours of the future world were drawn first in the scenario, with details about the possible pathways to that point filled in second. It is entirely possible, indeed probable, that some of the causal claims that turned into parts of scenarios were exaggerated so much as to be implausible, and that an unavoidable degree of bias or our own form of groupthink went into construction of the scenarios. One of the great strengths of scenario analysis, however, is that the scenario discussions themselves, as

described below, lay bare these especially implausible claims and systematic biases.⁸ An explicit methodological approach underlies the written scenarios themselves as well as the analytical process around them—that of case-centered, structured, focused comparison, intended especially to shed light on new causal mechanisms (George and Bennett 2005). The use of scenarios is similar to counterfactual analysis in that it modifies certain variables in a given situation in order to analyze the resulting effects (Fearon 1991). Whereas counterfactuals are traditionally retrospective in nature and explore events that did not actually occur in the context of known history, our scenarios are deliberately forward-looking and are designed to explore potential futures that could unfold. As such, counterfactual analysis is especially well suited to identifying how individual events might expand or shift the “funnel of choices” available to political actors and thus lead to different historical outcomes (Nye 2005, 68–69), while forward-looking scenario analysis can better illuminate surprising intersections and sociopolitical dynamics without the perceptual constraints imposed by fine-grained historical knowledge. We see scenarios as a complementary resource for exploring these dynamics in international affairs, rather than as a replacement for counterfactual analysis, historical case studies, or other methodological tools. In the scenario process developed for NEFPC, three distinct scenarios are employed, acting as cases for analytical comparison. Each scenario, as detailed below, includes a set of explicit “driving forces” which represent hypotheses about causal mechanisms worth investigating in evolving international affairs. The scenario analysis process itself employs templates (discussed further below) to serve as a graphical representation of a structured, focused investigation and thereby as the research tool for conducting case-centered comparative analysis (George and Bennett 2005). In essence, these templates articulate key observable implications within the alternative worlds of the scenarios and serve as a framework for capturing the data that emerge (King, Keohane, and Verba 1994). Finally, this structured, focused comparison serves as the basis for the cross-case session emerging from the scenario analysis that leads directly to the articulation of new research agendas. The scenario process described here has thus been carefully designed to offer some guidance to policy-oriented graduate students who are otherwise left to the relatively unstructured norms by which political science dissertation ideas are typically developed. The initial articulation of a dissertation project is generally an idiosyncratic and personal undertaking (Useem 1997; Rothman 2008), whereby students might choose topics based on their coursework, their own previous policy exposure, or the topics studied by their advisors. Research agendas are thus typically developed by looking for “puzzles” in existing research programs (Kuhn 1996). Doctoral students also, understandably, often choose topics that are particularly amenable to garnering research funding. Conventional grant programs typically base their funding priorities on extrapolations from what has been important in the recent past—leading to, for example, the prevalence of Japan and Soviet studies in the mid-1980s or terrorism studies in the 2000s—in the absence of any alternative method for identifying questions of likely future significance. The scenario approach to generating research ideas is grounded in the belief that these traditional approaches can be complemented by identifying questions likely to be of great empirical importance in the real world, even if these do not appear as puzzles in existing research programs or as clear extrapolations from past events. The scenarios analyzed at NEFPC envision alternative worlds that could develop in the medium (five to seven year) term and are designed to tease out issues scholars and policymakers may encounter in the relatively near future so that they can begin thinking critically about them now. This timeframe offers a period distant enough from the present as to avoid falling into current events analysis, but not so far into the future as to seem like science fiction. In imagining the worlds in which

these scenarios might come to pass, participants learn strategies for avoiding failures of creativity and for overturning the assumptions that prevent scholars and analysts from anticipating and understanding the pivotal junctures that arise in international affairs.