# **1AC**

**1ar**

**On the cp:**

On the enterprisers plank

-literally says board of directors and shareholders

-no empirical exmaople

-arbitrary

On the laws plank

Solvency deficit

**Dual use status and definitional uncertainty make banning LAW’s impossible, inevitably leading to circumvention!**

**Horowitz 19** (Michael Horowitz is a professor of political science @ UPenn,JOURNAL OF STRATEGIC STUDIES 2019, VOL. 42, NO. 6, 764–788 https://doi.org/10.1080/01402390.2019.1621174)// E

The arms control dilemma, in this case, is that the more the possession of LAWS improves the ability of a military to fight and win the nation’s wars, the harder it will become for the international community to effectively regulate them. That does not make regulation impossible, to be clear. But the dual-use character of AI means some types of LAWS could be accessible to many militaries, not only major powers, and a broader set of states would have something to lose, from a capabilities perspective, through regulation. It also gives a broader number of states potential interest in regulation.27 **Uncertainty surrounding the definition of a LAWS**, though not a central focus of this article, **could also make traditional arms control more difficult**. From nuclear treaties like the Limited Test Ban Treaty to the Ottawa Convention, **successful arms control agreements have generally tackled discrete technologies. The breadth of the category of AI and difficulties in defining what constitutes a LAWS at the margins are making reaching agreement on a definition of LAWS challenging** at the international level.

**4] Condo is a voting issue. Any turns I make on condo CPs can just be kicked creating a 2-1 structural skew. If they kick a condo CP, I lose all the rebuttal time I spent on it. I only have 4 minutes to respond to 7-minute speech and this skews my time even more. Fairness is a voter. People would quit if**

**debate was unfair which means no debate. No rvis You shouldn’t win for meeting the rules, Drop the Debater – 1] Deters future abuse.**

**Competing Interpretations – 1] Reasonability is arbitrary with bright line which invites judge intervention. All of this applies to a condo alt**

**Perm do both**

### **1AR – AT: Econ DA**

#### **1] This disad is fearmongering – the NLRA didn’t cause the recession and the economy adapts when one happens**

**Craver 06** Craver, Charles B. [fellow of the College of Labor and Employment Lawyers, and served as Secretary of the ABA Labor and Employment Law Section in 1986-87]; "The relevance of the NLRA and labor organizations in the post-industrial global economy." (2006). (AG DebateDrills)

From 1935 through the mid-1950s, union membership experienced the most rapid expansion in U.S. history, as the union density rate increased from 13.2 percent to 34.7 percent**.**4 Competition between ACL and CIO unions – and the unparalleled success of the newly created industrial unions – generated significant membership growth. As labor organizations enhanced their economic power, Congress amended the NLRA in 19475 and in 19596 to prohibit union unfair labor practices and to limit secondary activity by organized labor. 2 In the mid-1950s, the AFL and the CIO united into a single labor federation, and AFLCIO unions agreed not to compete with one another to represent the same workers. Although union membership continued to grow, it did not expand as rapidly as the nonagricultural labor force. As a result, by 1970, the union density rate had fallen to 27.3 percent.7 Throughout the late 1970s, the U.S. experienced high inflation, fueled by the formation of OPEC and rapidly rising oil prices.Cost-of-living adjustment clauses contained in many collective bargaining agreements caused labor costs in unionized manufacturing industries to increase substantially compared to costs associated with unorganized workers not covered by such contractual provisions. As businesses sought to reduce labor costs, northern manufacturing jobs were moved to sunbelt states. Labor-intensive work was often relocated to Maquiladoro plants in Northern Mexico.8 Electrical manufacturing and clothing production was relocated to low wage Asian countries. Businesses that continued to produce goods in the U.S. demanded wage and benefit reductions from labor unions that would enable them to compete with facilities operated in lower wage areas of the world**.** The American economy was being transformed from manufacturing to white-collar, service, and retail.By 1990, only 16.1 percent of nonagricultural labor force participants were union members.9 These new businesses were highly competitive, and they worked hard to discourage their employees from joining labor organizations. Private sector union membership began to decline substantially.By the end of 2005, only 7.8 percent of private sector, nonagricultural workers were members of labor organizations.10 If this trend continues, private sector labor unions will become almost entirely irrelevant in coming years.

#### **2] Worker strikes lead to increased wages and better working conditions – multiple examples.**

**Shierholz and Poydock 20** [Heidi Shierholz and Margaret Poydock, 2-11-2020, "Continued surge in strike activity signals worker dissatisfaction with wage growth," Economic Policy Institute, <https://www.epi.org/publication/continued-surge-in-strike-activity/>]

Teacher strikes In February 2018, teachers went on a statewide strike in West Virginia to demand just wages and better teaching and learning conditions. For nine days, schools across the state were closed as teachers, students, and community supporters protested at the state capital against the state government’s chronic underfunding of public education and the impact on the teachers and students. After a week and a half on strike, the West Virginia teachers received a pay increase. They also sparked a movement that prompted public school teachers in other states to strike in support for better pay and working conditions.[12](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note12) Consequently, the largest work stoppages by number of workers during 2018 and 2019 were in elementary and secondary schools in states such as Arizona, Colorado, Kentucky, North Carolina, and West Virginia.[13](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note13) Community support, such as students and parents protesting in solidarity at schools and state capitals, made it possible for hundreds of thousands of teachers to strike in an effort to improve their pay and working conditions. The General Motors strike In the early hours of September 16, 2019, nearly 50,000 workers walked out of General Motors (GM) factories across the nation and went on strike. The action followed GM’s decision to close multiple U.S.-based factories and move jobs abroad, even after the company received millions in corporate tax cuts.[14](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note14) GM workers went on strike to preserve job security, improve wages, and retain health care benefits. The GM strike was the longest major work stoppage in 2019, with over 1.3 million days idle.[15](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note15) The strike was also the first GM strike in over a decade. The six week strike concluded with the United Auto Workers and GM agreeing to a four-year contract that improved wages, sustained health care costs for workers at existing levels, created a transition process for temporary workers to become permanent employees, and committed to making investments in American factories.[16](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note16) In addition to improving the pay and working conditions of GM workers, the final contract will serve as a template for UAW’s contracts with Ford and Chrysler, creating a set of standards in the automotive industry.[17](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note17) The Stop & Shop strike Another notable major work stoppages of 2019 was the Stop & Shop strike. More than 30,000 workers at the New England-based grocery chain went on strike after negotiations over new contracts stalled for three months. During those negotiations, Stop & Shop had offered workers across-the-board pay increases but also proposed increasing the cost of health care, ultimately negating the pay raises. The workers argued that Stop & Shop could offer better compensation than it did because the company reported profits of more than $2 billion in 2018.[18](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note18) As a result of the impasse, workers in over 240 locations went on strike for better pay and benefits during the week of Easter. The Stop & Shop strike was the second largest private industry work stoppage in 2019, with over 215,000 days idle. The 11 day strike concluded with the United Food and Commercial Workers and Stop & Shop agreeing to a three-year contract that preserved health care benefits, increased wages, and maintained time-and-a-half pay on Sunday for current employees.[19](https://www.epi.org/publication/continued-surge-in-strike-activity/#_note19)

#### **3] Increased wages and benefits are key to boosting the economy.**

**Manyika et al. 18** [James Manyika, jaana Remes, and Jan Mischke, Harvard Business Review, 2-21-2018, "The U.S. Economy Is Suffering from Low Demand. Higher Wages Would Help," <https://hbr.org/2018/02/the-u-s-economy-is-suffering-from-low-demand-higher-wages-would-help>]

A little over a century ago, Henry Ford doubled the minimum pay of his workers to $5 a day. When other employers followed suit, it became clear that Ford had sparked a chain reaction. Higher pay throughout the industry helped lead to more sales, creating a virtuous cycle of growth and prosperity. Could we be at another Henry Ford moment? Some major companies have announced plans to boost employee pay. Target raised its minimum wage to $11 this past fall and committed to $15 by 2020. More recently, Walmart announced plans to match that increase to $11. In banking, Wells Fargo and Fifth Third Bancorp also announced pay increases for minimum wage employees. These pay increases have occurred against a backdrop of weak economic growth and rising income inequality. Economic growth has been stuck in low gear for almost a decade now, averaging around 2% a year since 2010 while productivity growth, the key to increasing living standards, has been languishing near historic lows since the financial crisis. But more recently there has been a glimmer of hope. After stagnating for years, wages have begun picking up slightly, as has productivity growth, while corporate profits remain near record highs. Are these recent wage increases merely necessary in light of a tightening labor market, or could they start a broader trend that may change our economic growth trajectory? [After a year-long analysis of seven developed countries and six sectors](http://www.mckinsey.com/productivitypuzzle), we have concluded that demand matters for productivity growth and that increasing demand is key to restarting growth across advanced economies. The impact of demand on productivity growth is often underappreciated. Looking closer at the period following the financial crisis, 2010 to 2014, we find that weak demand played a key role in the recent productivity growth decline to historic lows. In fact, about half of the slowdown in productivity growth — from an average of 2.4% in the United States and Western Europe in 2000 to 2004 to 0.5% a decade later — was due to weak demand and uncertainty. For example, in the mid-1990s to the mid-2000s, rising consumer purchasing power boosted productivity growth in both the retail and the auto sector, by encouraging a shift to higher-value goods that can be supplied at higher productivity levels. In the auto sector, as customers in the early 2000s purchased higher value-added SUVs and premium vehicles in both the United States and Germany, they spurred incremental productivity growth of 0.4 to 0.5 percentage points. Today, that trend has slowed slightly in both countries, contributing only 0.3 percentage points to productivity growth in the period 2010 to 2014. Similarly, in retail, we estimate that consumers shifting to higher-value goods, for example higher-value wines or premium yogurts, contributed 45% to the [1995-2000 retail productivity acceleration](https://www.mckinsey.com/global-themes/americas/us-productivity-growth-1995-2000) in the United States. This subsequently waned, dragging down productivity growth. To put it simply, when consumers have more to spend, they buy more sophisticated things. That’s good not just for consumers and producers, but for the overall economy, because making more sophisticated, higher-value things makes everyone involve more productive, and therefore helps increase overall standards of living. In addition, we found two other ways weak demand hurt productivity growth in the aftermath of the financial crisis: a reduction in economies of scale and weak investment. First, the economies of scale effect. In finance, productivity growth declined particularly in the United States, United Kingdom, and Spain due to contractions in lending volumes that banks were unable to fully offset with staff cuts due to the need for fixed labor (for example to support branch networks and IT infrastructure or to deal with existing loans and bad debt). The utilities sector, which has seen flattening demand growth due to both energy efficiency policies as well as a decline in economic activity during the crisis, was similarly not able to downsize labor due to the need for labor to support electricity distribution and the grid infrastructure, and here, too, productivity growth fell. Second, the effect of weak investment. We have found from our global surveys of businesses that almost half of companies that are increasing their investment budgets are doing so because of an increase in demand. Demand is the single most important factor driving corporate investment decisions. Investment, in turn, is critical for productivity growth, as it equips workers with more – and with more recent and innovative – equipment, software, and structures. But we have seen capital intensity growth fall to the lowest levels in post-WWII history. Weaker demand leads to weaker investment and creates a vicious cycle for productivity and income growth. Of course, the financial crisis is long since over, and the economy has recovered, at least by some measures. So what’s to worry about? Won’t demand return to pre-recession levels, and thereby increase productivity? Unfortunately, there is reason to believe that some of the drags on demand for goods and services may be more structural than crises-related. Slowing population growth means less rapid expansion of the pool of consumers. And rising income inequality is shifting purchasing power from those most likely to spend to those more likely to save. This is reflected in slowing growth expectations in many markets. For example, across our sectors and countries studied, in the decade from 1995 to 2004, growth in demand for goods and services averaged 4.6%, slowed to 2.3% in 2010 to 2014, and is forecast to slightly increase to 2.8% in 2014 to 2020. Today, there is concern about where the next wave of growth will come from. Some prominent economists worry that we may be stuck in a vicious cycle of economic underperformance for some time. Our analyses strongly suggest that supporting sustained demand growth needs to be part of the answer. Demand may deserve attention to help boost productivity growth not only during the recovery from the financial crisis but also in terms of longer-term structural leakages and their impact on productivity. Suitable tools for this longer-term situation include: focusing on productive investment as a fiscal priority, growing the purchasing power of low-income consumers with the highest propensity to consume, unlocking private business and residential investment, and supporting worker training and transition programs to ensure that periods of transition do not disrupt incomes. Companies play a key role in promoting growth through investment and innovation as well as supporting their workforce through training programs. Yet companies may also want to consider the words of Ford when he said: “The owner, the employees, and the buying public are all one and the same, and unless an industry can so manage itself as to keep wages high and prices low it destroys itself, for otherwise it limits the number of its customers. One’s own employees ought to be one’s own best customers.” While this is certainly not true for individual companies, it is true for the broader economy, and we might be at a rare point where the representatives of employees and employers alike share a common interest in healthy wage growth.

#### 4] **Economic collapse doesn’t cause war – prefer empirical evidence.**

**Clary 15** [Christopher Clary, PhD in political science from MIT, MA in national security affairs, postdoctoral fellow, Watson Institute for International Studies, Brown University, “Economic Stress and International Cooperation: Evidence from International Rivalries”, 4/25/15, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2597712>, MIT political science department]

Do economic downturns generate pressure for diversionary conflict? Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with **conciliatory policies** between strategic rivals. For states that view each other as military threats, the **biggest step possible toward bilateral cooperation** is to terminate the rivalry by taking political steps to manage the competition. Drawing on **data from 109 distinct rival dyads** since 1950, 67 of which terminated, the evidence suggests rivalries were approximately **twice as likely** to terminate during economic downturns than they were during periods of economic normalcy. This is true **controlling for all of the main alternative explanations** for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant politicalmilitary threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry. Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. **Collectively**, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice. **Economic Crisis Leads to Austerity** Economic crises generate pressure for austerity. Government revenues are a function of national economic production, so that when production diminishes through recession, revenues available for expenditure also diminish. Planning almost invariably assumes growth rather than contraction, so the deviation in available revenues compared to the planned expenditure can be **sizable**. When growth slowdowns are prolonged, the cumulative departure from planning targets can grow even further, even if no single quarter meets the technical definition of recession. Pressures for austerity are felt most acutely in governments that face difficulty borrowing to finance deficit expenditures. This is especially the case when this borrowing relies on international sources of credit. Even for states that can borrow, however, intellectual attachment to balanced budgets as a means to restore confidence—a belief in what is sometimes called “expansionary austerity”—generates incentives to curtail expenditure. These incentives to cut occur precisely when populations are experiencing economic hardship, making reductions especially painful that target poverty alleviation, welfare programs, or economic subsidies. As a result, mass and elite constituents strongly resist such cuts. Welfare programs and other forms of public spending may be especially susceptible to a policy “ratchet effect,” where people are very reluctant to forego benefits once they have become accustomed to their availability.6 As Paul Pierson has argued, “The politics [of welfare state] retrenchment is typically treacherous, because it imposes tangible losses on concentrated groups of voters in return for diffuse and uncertain gains.”7 Austerity Leads to Cutbacks in Defense Spending At a minimum, the political costs of pursuing austerity through cutbacks in social and economic expenditures alone make such a path unappealing. In practice, this can spur policymakers to curtail national security spending as a way to balance budgets during periods of economic turmoil. There is often more discretion over defense spending than over other areas in the budget, and it is frequently distantly connected to the welfare of the mass public. Many militaries need foreign arms and foreign ammunition for their militaries, so defense expenditures are doubly costly since they both take up valuable defense budget space while also sending hard currency overseas, rather than constituencies at home. Pursuing defense cuts may also conform to the preferences of the financial sector, which shows a **strong aversion** to military conflict even if that means policies of appeasement and conciliation.8 During periods of economic expansion, the opportunity costs associated with defense expenditure—the requirement for higher taxes or foregone spending in other areas—are real but acceptable. Economic contraction heightens the opportunity costs by forcing a choice between different types of spending. There is a constituency for defense spending in the armed services, intelligence agencies, and arms industries, but **even in militarized economies** this constituency tends to be numerically much smaller than those that favor social and economic expenditures over military ones. Defense Cutbacks Encourage Rapprochement An interest in defense cutbacks can lead to conciliatory behavior through two paths. **First**, the cutbacks themselves serve as a **concrete signal** to adversaries that the military threat posed by the economically distressed state is declining. This permits the other state to halt that portion of defense spending dedicated to keeping up, **breaking the back of ongoing arms races** through reciprocated, but non-negotiated moves. Unilateral conventional force reductions were a major element of Gorbachev’s foreign policy in the late 1980s, alongside negotiated strategic arms control, and diplomatic efforts to achieve political understandings with the United States.9 Gorbachev similarly used force reductions in Afghanistan, Mongolia, and the Soviet Far East to signal to China in 1987 that he was serious about political negotiations.10 Elsewhere, non-negotiated, tit-for-tat military redeployments facilitated Argentina-Brazil rapprochement.11 **Second**, leaders may believe cutbacks are necessary, but would be dangerous in the absence of negotiated improvements with traditional foes. Economic downturns can serve as **motivation to pursue arms control** or political settlement. During periods of normalcy, such outcomes would be positives, but are viewed as “too hard” by political leaders that move from one urgent problem to the next. During periods of economic crisis, however, arms control or political improvements might allow for much needed cuts in defense spending, and are **pursued with greater vigor**. The Johnson administration attempted both unilateral and negotiated arms limitations because of budgetary concerns as President Johnson and Secretary McNamara struggled to pay for the “Great Society” domestic programs and the increasingly costly Vietnam War. They first attempted unilateral “caps” on costly nuclear forces and anti-ballistic missile defenses and when this failed to lead to a reciprocal Soviet response they engaged in formal arms control talks. Détente continued in the Nixon administration, accelerating in 1971 and 1972, simultaneous with rising budget deficits and inflation so serious that Nixon instituted price controls. Nixon’s decision to sharply limit anti-ballistic missile defenses to enable arms control talks was **contrary to his strategic views, but necessitated by a difficult budget ary environment** that made paying for more missile defense emplacements unrealistic.12 As Nixon told his national security advisor Kissinger in an April 1972 discussion of ballistic missile and anti-ballistic missile developments: “You know we've got a hell of a budget problem. We've got to cut it down, we've got to cut 5 billion dollars off next year's defense budget. So, I don't want to [inaudible: do it?] unless we've got some settlement with the Russians.”13 In practice, unilateral defense cuts and force reductions are frequently combined with negotiated political agreements in a sequential, iterative fashion, where a unilateral reduction will **signal seriousness** that opens the way for political agreement, which in turn permits **even deeper reductions**. Defense cuts and force reductions are not only a means to achieve rivalry termination, but also a goal in and of themselves that rivalry termination helps secure. Leaders are seeking resources from defense they can use elsewhere. Thus when Argentine leader Raul Alfonsín campaigned for the need for drastic budgetary austerity, his specific “platform was the reduction of military spending to use it for the other ministries, connected with the concept of eliminating the hypothesis of conflict” with Argentinian rivals, according to Adalberto Rodríguez Giavarini, who served in Alfonsín’s ministry of defense (and later was Argentina’s foreign minister).14 Similarly, Gorbachev was motivated to reduce arms in the late 1980s because he determined it was necessary to cut Soviet defense spending and defense production, and repurpose part of the defense industry to make consumer and civilian capital goods, according to contemporary U.S. Central Intelligence Agency classified assessments.15 Thus the “**main reason**” why strategic arms control breakthroughs occurred from 1986 to 1988 and the Soviet Afghan intervention concluded in 1989 was a realization within the Politburo of “excessively high expenditures on defense,” according to Nikolai Ryzhkov, Gorbachev’s prime minister.16 **Economic Downturns Provoke Strategic Reassessment**: Threat Deflation and Prioritization Economic downturns encourage leaders to seek new ideas to use to frame their policy problems. During periods of economic difficulty, elites can come to realize that their problems are not amenable to old solutions, and search for new ideas.17 During an economic crisis, politics and policy are “**more fluid**,” as old answers seem stale and insufficient.18 An ideational entrepreneur that can link economic **lemons** to foreign policy **lemonade** can find a patron when leaders are casting about for ways to reframe the world in acceptable ways to their peers and publics. The behavior of an old foe is often ambiguous, and can be viewed as either injurious to one’s interests or neutral toward them. During periods of normalcy, the motivation of defense establishments is tilted toward threat and danger. During periods of economic crisis, national leaders have a counteracting motivation to **downplay such dangers**, so that the threats faced by a nation are manageable through available resources. Economic difficulties provide a motivation for leaders to view equivocal signals from the international system in a way that is benign. To the extent that rivalries are perpetuated because of threat inflation, economic downturns provide incentives to deflate the threat, potentially **disrupting cycles of competition and enmity**. South Korean president Kim Dae-jong came to power in the aftermath of the 1998 Asian economic crisis, pursued a “sunshine policy” toward the North, cut South Korean defense spending in nominal and real terms, and pursued a policy toward North Korea that political scientist Dong Sun Lee called “threat deflation” despite the growing North Korean nuclear weapons threat.19 Economic crises can also spur strategic reassessment through another channel. If leaders view economic problems as structural, rather than a temporary gale, they may come to question whether available national resources are sufficient to confront all of the national threats identified in the past. This creates incentives to economize threats, seeking political settlements where possible in order to focus remaining resources on competitions that can be won. A concrete example: in 1904, the chancellor to the Exchequer wrote his cabinet colleagues: “[W]e must frankly admit that the financial resources of the United Kingdom are inadequate to do all that we should desire in the matter of Imperial defense.”20 The result was a British decision to minimize political disagreement with the United States and focus on other defense challenges. While such a decision is in line with realist advice, it occurred not when the power trajectories were evident to British decisionmakers but when the budget situation had reached a crisis that could no longer be ignored. Economic Downturns Increase Incentives for International Economic Cooperation Economic downturns not only create incentives to cut spending, they encourage **vigorous pursuit** of opportunities for economic cooperation. This, too, can engender conciliatory behavior. Economic downturns can **increase motives to pursue trade** and investment. Rivalries with old foes often directly impinge on trade and investment with the adversary and may indirectly impinge on trade and investment with third parties, especially if the rivalry is viewed as being likely to generate disruptive military conflict. Additionally, economic aid is sometimes used as an inducement for adversaries to set aside a political dispute. This aid can either serve as a side payment from one rival to another, or it can be offered by a third party to one or both rivals as an incentive to set aside lingering disputes. Such aid is more attractive during periods of economic turmoil than during periods of comparative normalcy. In South Asia, India and Pakistan struggled from 1947 to 1960 with how to manage water resources in the Indus Rivers basin, inheriting a canal system meant to service pre-partitioned India. Pakistan, suffering an economic downturn, and India, reliant on foreign aid to avert economic crisis, agreed to an Indus Waters Treaty in 1960 to resolve the lingering dispute, made possible in substantial part because of World Bank financing that was especially attractive to the struggling economies. In the Middle East, Egypt and Israel made the hard choices necessary for the Camp David accord in 1979 precisely because the Sadat and Begin governments faced difficult economic situations at home that made the U.S. aid guarantee in exchange for a peace agreement especially attractive.21 In 1982, the Yemen’s People’s Republic agreed to stop its attempts to destabilize Oman, because otherwise Yemen would not receive economic assistance from Arab oil producing states that it desperately needed.22 In the late 1990s, El Niño-induced flooding devastated Ecuador and Peru, spurring reconciliation as leaders sought to increase trade, secure investment, and slash military expenditures so they could be used at home.23 As one Western diplomat assessed at the time, Ecuador and Peru “have decided it's better to see reason…. They see foreign companies eager to invest in South America, and if Peru and Ecuador are in conflict, it makes them less attractive than, say, Argentina or Brazil or Chile for investment purposes. That's the last thing either country wants.”24 **Economic Downturns Can Cause Meaningful Leadership Change** The above mechanisms have identified how economic difficulties can alter the preferences of an incumbent leader. Additionally, economic crises can lead to leadership turnover and, during periods of difficulty, the selection process that determines new leadership can **loosen ideological strictures** that relate to extant rivalries. Leaders may be selected based on judgments about their ability to cope with economic problems, with greater elite acceptance of ideological heterogeneity in foreign policy beliefs than in periods of normalcy.25 In Stephen Brooks and William Wohlforth’s words, “If everything is going well or is stable, then why select leaders who might subvert the triedand-true identity? But if that identity is leading to increased material difficulties, pressure for change will likely mount. In these circumstances, those who are willing to alter or adjust the hallowed precepts of the existing identity and its associated practices are more likely to assume power.”26 Economic crisis, then, can spur incumbent leaders to either **abandon the “baggage” of rivalry** or facilitate the selection of new leaders that do not carry such baggage. The most well-known example of an incumbent selectorate looking for a reformer, even one without much foreign policy experience, involves Mikhail Gorbachev’s ascension to the Soviet premiership.

**On the k**

#### **Perm do both -- no model of anti-capitalism is consistent with Big tech taking down a Jedi project and any revolution would end them. There’s no reason our politics forcloses theirs**

#### **Framework – weigh the case and the ROB is to determine whether the plan is a good idea through policy analysis – anything else moots the aff, is arbitrary, and destroys topic education. Arbitrary frameworks moot the 1AC – there are infinite parts of the 1AC they could problematize which forces 1ar restart. Our scholarship is tied to the consequences of the plan so it makes no sense to separate assumptions from implementation. Fairness matters—debate’s a competitive game and it’s key to foster valuable discussion.**

#### **Case outweighs -- our evidence says prevention of climate change and military laws projects must happen immediately to prevent tipping points. Their alt can’t happen fast enough which means case is a prerequisite**

**On the link**

**1] the link is super not contextual to striking. No warrants and literally dosent even have the word strike in it. Not contextual to the topic. Generic work. Severely Mitigates the link**

**2] Gourevitch answers their link. It contextualizes how strikes radically alter workers relation to capital**

#### **STRIKES CHALLENGE THE ROOT CAUSE OF VIOLENCE –** they begin the reversal of economic and structural domination – impact turns all econ DAs.

**Gourevitch 2:** Gourevitch, Alex. [Assistant professor of Political Science, Brown University] “Quitting Work but Not the Job: Liberty and the Right to Strike.” Cambridge University Press, June 13, 2016. MB/CH

We now have a way of explaining the right to strike as something decidedly more modern than just residual protection of some feudal guild privilege. The right to strike springs organically from the fact of structural domination. **Striking is a way of resisting that domination at the point in that structure at which workers find themselves**—the particular job they are bargaining over**. It is not that workers believe they have some special privilege but quite the opposite. It is their lack of privilege, their vulnerability, that generates the claim. Structural domination makes its most immediate appearance in the threat of being exploited by a particular employer, even though the point of structural domination is that workers can be exploited by any potential employer. The sharpest form that the structural domination takes is through the threat of being fired, or of never being hired in the first place. The claim that strikers make to their job is therefore, in the first instance, a dramatization of the fact that their relationship is not voluntary, it is not accidental and contingent. They are** always already forced **to be in a contractual relationship with some employer or another. The refusal to perform work while retaining the right to the job is a way of bringing to the fore this social and structural element in their condition. It vivifies the real nature of the production relationship that workers find themselves in. Quitting the work but not the job is a way of saying that this society is not and cannot be just a system of voluntary exchanges among independent producers. There is an underlying structure of unequal dependence, maintained through the system of contracts, that even the “most voluntary” arrangements conceal. This is not just a dramaturgical fact about strikes, though the drama has, in many cases, been nearly Greek in its intensity and tragedy. It is a point about power. It would not have the drama if it were not a power play. By demanding the job as a matter of right workers do not just publicize their domination, they attempt to challenge the forcing to which they are subject. Limiting the employer’s ability to make contracts with others, and preventing other workers from taking those jobs, is a way of reversing the power relationship. It is a way of neutralizing the threat of losing the job, which is the most concrete, immediate point of contact with that background structure of domination. If you cannot lose your job, you are less vulnerable, less immediately economically dependent.** Of course, this does not do away with the background structure itself, but a particular strike can never do that. Though even here, there are times when **a strike, as it becomes a more generalized rejection of structural domination—say in large-scale sympathy strikes or general strikes—can begin to challenge the broad structure of economic control itself.**

#### **[Gourevitch 3]** **AND** the RIGHT to strike reverses the power imbalance at the heart of capitalistic labor, regardless of strikes’ outcomes.

**Gourevitch 3:** Gourevitch, Alex. [Assistant professor of Political Science, Brown University] “Quitting Work but Not the Job: Liberty and the Right to Strike.” Cambridge University Press, June 13, 2016. MB/CH

**This is a challenge to the logic of the capitalist labor market that begins from within, at the location of the strike itself. At that point in the system, strikers temporarily reverse the relationships of power by eliminating that employers’ ability to use the threat of job- loss against them. They do that not just by claiming the job but by claiming it** as a matter of right**. The thought is that the exploitation of workers is unjustifiable, an unjustifiability that appears in the terms of the employment itself. Workers have the right to the job, and therefore to interfere with the employer’s property rights and other workers’ contract rights, because it is unjustifiable to subject workers to exploitative conditions.** To be sure, many strikes and many strikers never articulate the argument in this language. But the point is not what workers always explicitly say, but rather what they do and what that doing presupposes. I am reconstructing the ideal presuppositions of a strike, and in particular, how to think about the peculiar set of assumptions about the right to a job. **We have seen that it is no atavistic recovery of traditional rights and guild privileges but is a way of resisting a thoroughly modern form of social domination from a point within that structure of domination. Again, facing a freedom to quit the job but not the work, workers assert a right to quit working but keep the job. To put this all another way, though strikes are still about bargaining, and in that sense like market exchanges, they are simultaneously a challenge to the market as the appropriate standard by which to judge the fairness of workers’ compensation.** The market is unfair because of workers’ structural disadvantage. Over and against the market value, strikers can argue that there are shared, or at least shareable, standards of fair compensation that employers should adhere to. While here again we see the echoes of feudal theories of “just price” and equity jurisprudence,61 we must note that in principle the claim is not, or does not have to be, based on special privilege. Rather, it begins by challenging the view that labor “freely” finds its value on the market. **Workers are always already in relationships with employers and they cannot leave the basic relationship of earning money only by selling labor- power, no matter how many jobs they might quit**. The standards we use for evaluating those kinds of forced relationships, like the state, are different, based on shared conceptions of justice and human need, not private agreement. Two final observations before we move to the work- place itself. If the foregoing analysis is correct then we can get a better sense of the way a right to strike relates to the rights of employers and replacement workers. **The right to strike does not have to include the claim that employers have no right to use their property to pursue their own interests. It just means employers have no right to use their property in ways that allow them to exploit workers. That is why, from within the theory of the right to strike, employers do not have a unilateral right to hire whomever they please on whatever terms they please. If that latter right is permitted then, of course, employers may take advantage of the fact that every propertyless worker needs a job. Further, the right to strike does not have to mean replacement workers have no right to pursue their interests and make labor contracts. Rather, it means they do not have a right to use that power to reproduce the system of structural domination that puts all workers at an unfair disadvantage. That is why they may not take jobs that striking workers refuse to perform.**

**Lundstorm is contingent on unions not strikes themselves, but uncondo strike dosent neccsarily mean unions and can include wildcat strikes**

**The impact**

**The impact is literally a larp impact of ecologically sustainable form**

**Zero ontology claims- 1] there were no ontology claims or warrants 2] even if you dont buy that we dont have ontological attachments to work. We are not tied to work. We can choose when we are productive or not in our daily lives and we can quit jobs.**

**On the alt.**

**This literally says the k is about work and productivity in general. Does the alt just get rid of work. Double bind either they get rid of all work which would occur under any economic system whether or not its cap, communist or socialist in which case that terrible. Work is good. We literally need work to have our society function. We need people to make stuff. We need farmers, doctors, teachers, etc.**

**Or it dosent get rid of all work which proves it being cap or the alt can solve enough cuz some form of work will still exist**

**perm**

#### **Neolib is sustainable and entrenched – any alternative fails**

Adam **Arvidsson**, Professor of Sociology, University of Milano, **’13**

(“Thinking beyond neo-liberalism: A response to Detlev Zwick,” [Ephemera,](http://www.ephemerajournal.org/contribution/thinking-beyond-neo-liberalism-response-detlev-zwick) volume 13(2): 407-412)

Today this realistic alternative no longer exists: actually **existing socialism has become insignificant** as a geopolitical player. More importantly, **thirty years of neoliberal governance**, together with the transition to a new global information-intensive regime of capitalist accumulation – ‘communicative capitalism’ perhaps – has effectively dismantled what was left of the structure and subjectivities that supported this alternative vision. Traditional **working class politics is dead**, and the working class itself has been recomposed beyond recognition; people supposedly ‘bowl alone’ and the counter culture has been more or less entirely absorbed within consumer society. We have seen the completion of what Marx described as the process of ‘real subsumption’. Every alternative to capitalism has been included within capitalism and positioned as a potential source of value. As a consequence, life within capitalism has been depoliticized, deprived of an alternative in the name of which a practically effective critique can be mounted.

This makes it trickier to do critical theory. We can of course still criticize the actual state of things. We can point to the precarious relations that prevail among creative knowledge workers; show how exploitative and unjust conditions are intensified by the very forces that drive the globalization of communicative capitalism, like the outsourcing of design work; or lament the fact that a triumphant neoliberal regime subsumes and appropriates aspects of subjectivity and social life that we think should have been left alone. To produce such critiques remains useful intellectual work – I have done it in other contexts (Arvidsson et al., 2010; Arvidsson, 2007), as has Detlev Zwick (2008), and many others. To the extent that such critiques reach a mass audience, they can become a progressive impulse to action and reflection – as in the case of Naomi Klein’s work inspiring the ‘no global’ movement (to use an inadequate name coined by the mainstream press). **But such a critique without an alternative remains unsatisfactory for at least three reasons.**

First, and most superficially, since everyone else is doing it, the marginal utility of yet another piece of critical theory **rapidly diminishes**, as does the intellectual satisfaction that can be derived form producing it.

Second, and more seriously, **the absence of a realistic alternative**, or even of a historical subject in the name of which such a critique can be pronounced, **risks rendering critical theory moralistic and rather toothless**. We might agree with Zwick when he suggests that the outsourcing of design work from Toronto to the Philippines is somehow wrong, but it is difficult to understand exactly why this would be the case. (Why shouldn’t Philippine designers be allowed to compete with Canadian designers? Can the ‘creative class’ claim an exemption from the global economy? Perhaps the answer is ‘yes’, but I do not know of any viable alternative vision of society that is able to substantiate that ‘yes’.)

Third, and most importantly, in the absence of an alternative vision, critical theory remains rather **unconvincing to the people in the name of whom it proposes to spea**k. I can assure you – and I’ve tried! – that you won’t become an organic intellectual among social entrepreneurs or precarious creative workers by telling them that they are exploited, that they sell out their subjectivity, or that the system in which they operate is unjust. **Pure critique is simply not attractive** **enough to make the multitude of new productive subjects,** fragmented by neoliberalism, cohere into a historical subject. To do that you need at least the myth of an alternative, as agitators from Sorel via Lenin to Subcomandante Marcos could tell you.

Don’t get me wrong. I am not proposing that it is wrong to point to the precarious conditions of knowledge work, or that we should not do this as academics and researchers. This is still an important task. But it is not enough. Critical theory must do this, but it must also do more. It must also engage with the question of what a realistic alternative to neoliberalism could be, and it must elaborate a realistic political vision in the name of which a critique that is productive and progressive, and not simply moralistic, can be articulated.

By realistic, I mean that such an alternative must be sought in the actual relations of production that characterize the contemporary information economy. Zwick’s suggestion that we

imagine a commonism of productive consumption as collaborative sharing in the absence of private property and combined with an inclusive model of political determination, collective sovereignty, belonging and justice

– and so on – is simply unproductive to my mind. We might all agree that an economy of commons that has done away with capitalism might be more desirable, but the reality is that hybrid forms, like the game modders that Zwick cites, **where a an economy of commons co-exists with a capitalist value logic**, in some form, **are indeed becoming the norm**. At that point the interesting thing to do is not so much to criticize the enduring capitalist nature of these hybrid forms, but rather to investigate the new forms of politics that they might give rise to. This in no way implies that one does away with conflict and politics. Rather, it implies investigating and understanding the new spaces and discourses through which such a new type of politics can be articulated.

In order to do this we must start with what the **actors** involved in these processes **actually think themselves.** It is quite useless to simply deploy existing philosophical perspectives, or to compare the reality of communicative capitalism to **utopian projections** of the political visions of last century. Instead we must start with the ‘empirical metaphysics’, to use Bruno Latour’s term, that actually prevail among people engaged in such hybrid practices. We might all want to do away with neoliberalism and the forms of life that it has promoted. But at the same time, **we all recognize that the neoliberal project has been one of the most successful projects of governmentality since, perhaps, the very project of disciplinary power that Foucault himself described.** Rebus sic stantibus **we cannot simply wish it away.**

**We need to recognize that people have changed**, **that competitive individualism, self-branding and an entrepreneurial mentality are, by now, normal features of life**. The same thing goes for the popular political myths that prevail among advanced knowledge workers, what Zwick calls ‘cyber-utopianism’. We need to recognize that notions like peer-to-peer production, high-tech gift economies and the like have the power to mobilize the energies of the subjects that are most likely to become the pioneers of a new political vision – today’s version of the skilled workers that have taken the lead in most modern political movements. Even though the social theory that they produce might be shallow and imperfect, and even though they might not have read Marx and Foucault as well as we have, we cannot simply dismiss this vision as a mere ideology to be replaced by our theoretically more refined ideology.

Like the relations of production that are emerging in communicative capitalism and the subjectivity of knowledge workers, these myths are part of the raw material with which the Gramscian intellectual must engage in order to articulate new understandings of common sense that are both politically progressive and intuitively attractive to the people that they are supposed to mobilize. In other words, in order to articulate an alternative, we cannot simply dismiss the reality of communicative capitalism and fall back on what remains of the political utopias of last century. **We need to engage with the reality of neoliberal communicative capitalism** and try to push its dialectic beyond its apolitical present state. We must investigate what the real conditions of production and imagination are and ask ourselves where they might lead. Critical theory needs to become an empirical, and not simply a philosophical, enterprise.

#### **Capitalism is self-correcting– war and environmental destruction are not profitable and innovation solves their impacts**

**Kaletsky ’11** (Anatole, editor-at-large of *The Times* of London, where he writes weekly columns on economics, politics, and international relationsand on the governing board of the New York-based Institute for New Economic Theory (INET), a nonprofit created after the 2007-2009 crisis to promote and finance academic research in economics, Capitalism 4.0: The Birth of a New Economy in the Aftermath of Crisis, p. 19-21)

Democratic **capitalism is a system built for survival. It has adapted successfully to shocks of every kind, to upheavals in technology and economics, to political revolutions and world wars. Capitalism** has been able to do this because, unlike communism or socialism or feudalism, it **has an inner dynamic akin to a living thing. It can adapt and refine itself in response to the changing environment.** And it will evolve into a new species of the same capitalist genus if that is what it takes to survive. In the panic of 2008—09, many politicians, businesses, and pundits forgot about the astonishing adaptability of the capitalist system. Predictions of global collapse were based on static views of the world that extrapolated a few months of admittedly terrifying financial chaos into the indefinite future. **The self-correcting mechanisms that market economies and democratic societies have evolved over several centuries were either forgotten or assumed defunct.** The language of biology has been applied to politics and economics, but rarely to the way they interact. **Democratic capitalism’s equivalent of the biological survival instinct is a built-in capacity for solving social problems and meeting material needs. This capacity stems from the principle of competition, which drives both democratic politics and capitalist markets. Because market forces generally reward the creation of wealth rather than its destruction, they direct the independent efforts and ambitions of millions of individuals toward satisfying material demands, even if these demands sometimes create unwelcome by-products.** Because voters generally reward politicians for making their lives better and safer, rather than worse and more dangerous, **democratic competition directs political institutions toward solving rather than aggravating society’s problems**, even if these solutions sometimes create new problems of their own**. Political competition is slower and less decisive than market competition, so its self-stabilizing qualities play out over decades or even generations, not months or years.** But regardless of the difference in timescale, **capitalism** and democracy have one crucial feature in common: Both are mechanisms that **encourage individuals to channel their creativity, efforts, and competitive spirit into finding solutions for material and social problems.** And in the long run, these mechanisms work very well. If we consider democratic capitalism as a successful problem-solving machine, the implications of this view are very relevant to the 2007-09 economic crisis, but diametrically opposed to the conventional wisdom that prevailed in its aftermath. Governments all over the world were ridiculed for trying to resolve a crisis caused by too much borrowing by borrowing even more. Alan Greenspan was accused of trying to delay an inevitable "day of reckoning” by creating ever-bigger financial bubbles. Regulators were attacked for letting half-dead, “zombie” banks stagger on instead of putting them to death. But these charges missed the point of what the democratic capitalist system is designed to achieve. In a capitalist democracy whose raison d’etre is to devise new solutions to long-standing social and material demands, a problem postponed is effectively a problem solved. To be more exact, a problem whose solution can be deferred long enough is a problem that is likely to be solved in ways that are hardly imaginable today. **Once the self-healing nature of the capitalist system is recognized,** the charge of “passing on our problems to our grand-children”—whether made about budget deficits by conservatives or about global warming by liberals—becomes morally unconvincing. Our grand-children will almost certainly be much richer than we are and will have more powerful technologies at their disposal. It is far from obvious, therefore, why we should make economic sacrifices on their behalf. Sounder morality, as well as economics, than the Victorians ever imagined is in the wistful refrain of the proverbially optimistic Mr. Micawber: "Something will turn up."

## **Adv 1– Lobbying**

#### **Big tech holds a massive amount of political power, and their “climate change” measures are a façade to hide the actual lobbying that they do.**

**Terstein 21** [Terstein, Zoya, 1-28-2021, "Big Tech says it wants to solve climate change. Its lobbying dollars say otherwise.," <https://grist.org/politics/big-tech-says-it-wants-to-solve-climate-change-its-lobbying-dollars-say-otherwise/>] //DDPT

It’s hard to quantify political power, but it’s safe to say that big tech companies wield [a lot](https://www.newyorker.com/tech/annals-of-technology/what-can-america-learn-from-europe-about-regulating-big-tech) of it. A decade ago, companies like Amazon and Google employed [just a smattering of lobbyists](https://www.washingtonpost.com/technology/2020/01/22/amazon-facebook-google-lobbying-2019/) who worked to influence D.C. policymakers on their behalf. Now, the Big Five tech companies — Apple, Microsoft, Facebook, Google, and Amazon — spend tens of millions of dollars each year lobbying Congress. In 2020, they collectively spent [$61 million domestically lobbying](https://www.cnbc.com/2021/01/22/facebook-spent-more-on-lobbying-than-any-other-big-tech-company-in-2020.html) on issues that included international tax policies, copyright reform, and content policy. Only a tiny fraction of Big Tech’s legislative lobbying might is going toward advocating for climate policy, according to a [new report](https://influencemap.org/report/Big-Tech-and-Climate-Policy-afb476c56f217ea0ab351d79096df04a) from the think tank InfluenceMap. Between 2019 and 2020, just 4 percent of Apple, Alphabet (Google’s parent company), Amazon, Facebook, and Microsoft’s self-reported lobbying activities targeted climate-related policy at the federal level. In Europe, these companies do even less lobbying on climate — InfluenceMap says they have been “largely silent on the EU’s ambitious climate policy agenda.” This halfhearted effort to promote climate-friendly policies stands in sharp contrast to Big Tech’s much-publicized promises to lead the rest of the business sector, and indeed the entire world, toward a greener future. Apple, for instance, revealed a plan last summer to make its supply chain and products carbon neutral by 2030, something CEO Tim Cook said will be good for the planet and its products. “With our commitment to carbon neutrality, we hope to be a ripple in the pond that creates a much larger change,” [Cook said](https://www.apple.com/newsroom/2020/07/apple-commits-to-be-100-percent-carbon-neutral-for-its-supply-chain-and-products-by-2030/). In 2019, Amazon unveiled a climate plan that aims to get the company to meet the decarbonization requirements of the Paris Agreement 10 years early. “If we can do this, anyone can do this,” Amazon founder Jeff Bezos [said](https://www.cnbc.com/2019/09/19/jeff-bezos-speaks-about-amazon-sustainability-in-washington-dc.html) at the time. “Climate change is a crisis we will only be able to address if we all work together on a global scale,” Facebook founder Mark Zuckerberg [said](https://sustainability.fb.com/). Facebook aims to make its global operations [net-zero](https://sustainability.fb.com/), starting with making its value chain net-zero by 2030. “We will support new public policy initiatives to accelerate carbon reduction and removal opportunities,” Microsoft president Brad Smith [wrote](https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/) in January last year, outlining seven principles the company will adhere to in its quest to remove more emissions than it produces by 2030 and eliminate all of its emissions since 1975 by mid-century. “We know that no company, no matter how ambitious, can solve a challenge like climate change alone,” Google said in its [sustainability report](https://www.gstatic.com/gumdrop/sustainability/carbon-free-by-2030.pdf) last September. It’s clear that these companies like to talk about climate action being a collective effort. But despite the many detailed climate plans and pledges, Big Tech has done strikingly little government-level work to bring about the global-scale climate action it says it wants to see. The little lobbying the Big Five do has been largely focused on technical rules that are directly tied to these companies’ abilities to stick to their climate commitments, like procuring enough renewable energy. Meanwhile, the world is [nowhere near](https://www.theguardian.com/environment/2020/dec/12/world-is-in-danger-of-missing-paris-climate-target-summit-is-warned) where it needs to be to meet the climate targets outlined in the Paris Agreement. “Relative to their scale, they invest very little in saving the planet,” Nic Bryant, a spokesperson for the climate activist group Extinction Rebellion, told Grist, referring to tech companies. “These companies could and should be leading the way.”

#### **Terstein continues:**

Further complicating Big Tech’s stance on climate are its membership in industry associations. InfluenceMap scored each of the Big Five tech companies on the climate-friendliness of the industry groups they belong to. These are organizations like the Chamber of Commerce, the [most powerful trade organization in the world](https://www.wri.org/blog/2020/08/how-chamber-commerces-scorecard-elevates-climate-deniers), which has [lobbied extensively against climate policy](https://drive.google.com/file/d/1vopnWHRekDcqc8yEqAQi8TnoXubs-abK/view), as well as groups with progressive agendas like the Renewable Energy Buyers Alliance. By looking at Big Tech’s membership in industry associations across the board, InfluenceMap found “misalignment between the companies’ own climate lobbying positions and those of their industry associations.”“Big Tech has no problem shelling out tens of millions of dollars jockeying for their own interests in Washington, so we know their failure to lobby for climate solutions is not due to a lack of means, but a lack of will,” David Arkush, director of the climate program at the nonprofit consumer advocacy organization Public Citizen, told Grist. “If they’re serious about climate, they need to push for government climate action at the scale and speed we need.”

#### **But Big tech lobbying is uniquely key to effective climate action – it’s the only way to ensure federal policy change.**

**Winston 19** [Winston, Andrew, Harvard Business Review, 10-15-2019, "Corporate Action on Climate Change Has to Include Lobbying," <https://hbr.org/2019/10/corporate-action-on-climate-change-has-to-include-lobbying>] //DDPT

The business world has recently started acting on climate change in earnest. Hundreds of the world’s largest companies have agreed to use [100% renewable energy](http://there100.org/companies) and set [targets](https://sciencebasedtargets.org/companies-taking-action/) that commit them to reduce emissions at the pace that science demands. Companies are [buying many gigawatts of renewable energy](https://www.forbes.com/sites/mikescott/2019/09/09/companies-continue-to-drive-demand-for-clean-energy/amp/?__twitter_impression=true), slashing their own energy use, and innovating to create products that help customers reduce their emissions. But it’s not nearly enough. The climate crisis is upon us, and there’s no time to wait for voluntary corporate action to tackle the challenge. We need the collective will that government provides. Many in business will rebel against this idea, but we are long past the point where free markets alone could solve the challenge in time (if such a possibility ever even existed). Business needs to, [in the words of Environmental Defense Fund president Fred Krupp](https://www.wri.org/news/2019/10/release-major-environmental-groups-call-businesses-lead-climate-policy), “unleash the most powerful tool they have to fight climate change: their political influence.” This is the logic and imperative behind [an announcement today](https://medium.com/@timetolead/its-time-to-lead-on-climate-policy-6f849eb114ba) from 11 environmental and sustainability organizations that have significant influence on the world’s largest companies and on policymakers. Using a full-page ad in The New York Times, the group is calling for business to advocate for policies, at all levels of government, that are consistent with what climate science is telling us we need to do — what they’re calling a “science-based climate policy agenda.” The statement also calls for companies to adjust their trade associations’ advocacy to align with climate science. (The signatories are the heads of BSR, C2ES, CDP, Ceres, Conservation International, Environmental Defense Fund, The Climate Group, The Nature Conservancy, the Union of Concerned Scientists, World Resources Institute, and WWF U.S.) In support of this public plea, the Sustainable Food Policy Alliance — which includes food and consumer products giants Nestle, Unilever, Mars, and Danone — is running the same letter in Roll Call with the message “we agree.” The new statement is also building on a [similar call to action last month](https://www.ceres.org/sites/default/files/Final%20Generic%20SIGN-ON%20PACKET%20Investor%20Expectations%20on%20Climate%20Lobbying%20sign-on%20packet%20September%202019.pdf) from 200 investors with more than $6 trillion in assets. It’s about time. Companies have long allowed a chasm to open up between their own statements and actions on climate and what their government relations and lobbying teams are doing in the halls of power. Most of these companies have also conveniently ignored that their own industry and trade associations have generally been fighting climate policy every step of the way. It’s an important discussion to have right now and this initiative could have an impact. I want to offer some thoughts on the context and where the policy discussion could, or should, go. This isn’t the first attempt. In 2006, some of these same NGOs formed the [U.S. Climate Action Partnership](https://en.wikipedia.org/wiki/U.S._Climate_Action_Partnership) with notable business partners such as Alcoa, BP, Caterpillar, Dupont, and GE. While the call to action was vague, it was an important message from some heavy industry players that they wanted pro-climate policies. But when the Waxman-Markey cap-and-trade climate bill [failed in the U.S. Senate in 2009](https://www.eenews.net/stories/1060039422), and climate policy entered the wilderness for years, the partnership petered away. Over the last decade, the nonprofit Ceres, a signer on this latest statement, has convened the Business for Innovative Climate and Energy Policy, or [BICEP](https://www.ceres.org/networks/ceres-policy-network), to bring company leaders in to talk to legislators. And more recently, a group of scientists and former high-ranking government officials (mostly Republican), launched the [Climate Leadership Council](https://www.clcouncil.org/), which is pushing for [a package of policies](https://www.clcouncil.org/our-plan/) that includes a carbon fee and “dividend” that returns most of the revenue to citizens. But none of these have really gotten the kind of traction we need. This time could be different. A few shifts in the world may make this push more effective. First, climate change is real and affecting businesses today. We’re not just discussing a model of future weather and costs; we’re seeing very real and massively expensive disruptions to operations, supply chains, and communities. Second, with increasing transparency, it’s much harder to hide the disconnect between what companies are saying they’re doing and what they’re actually advocating for behind the scenes. A [just-released analysis of corporate lobbying](https://www.theguardian.com/environment/2019/oct/10/exclusive-carmakers-opponents-climate-action-us-europe-emissions) shows that major auto companies, while talking up their efforts on electric vehicles, have lobbied aggressively to fight any real climate policy. Third, stakeholders — customers, employees, and communities — are demanding more action and are less tolerant of inconsistencies on this issue. Recently [Microsoft employees staged a walkout](https://www.theverge.com/2019/9/19/20874081/microsoft-employees-climate-change-letter-protest) for climate, and almost 8,700 Amazon employees have [signed an open letter](https://medium.com/@amazonemployeesclimatejustice/public-letter-to-jeff-bezos-and-the-amazon-board-of-directors-82a8405f5e38) calling on their CEO to lead on the issue. (Amazon then announced it would go climate-neutral by 2040 and [buy 100,000 electric vans](https://www.freightwaves.com/news/amazon-announces-purchase-of-100000-ev-delivery-vehicles-from-rivian-the-largest-order-ever)). There’s clearly pressure on business to take a broader role in society, which is why about 200 big-company CEOs signed a [statement from the Business Roundtable](https://hbr.org/2019/08/is-the-business-roundtable-statement-just-empty-rhetoric) pledging that they would focus on stakeholder needs, not just shareholder value.

#### **US climate action specifically spills over and spurs global climate action.**

**Geman 6/7**/21 [National Journal Energy and Environment Correspondent, reporter for Axios, Ben, “The global stakes of Biden's infrastructure negotiations.” https://www.axios.com/biden-infrastructure-bill-climate-change-87b70d16-fdec-4c84-84a6-e7532c592f15.html]

The infrastructure drama enveloping Capitol Hill could spill onto the global climate stage. Why it matters: Major new U.S. investments and policies could help spur other nations to take more aggressive and tangible steps to cut emissions. But failure to steer major new initiatives through Congress could hinder the White House diplomatic posture as the U.N. conference looms. State of play: The White House is negotiating with Republicans amid all kinds of uncertainty over whether Democrats can pass legislation without GOP backing. President Biden has proposed major investments in electric vehicles, grid tech, mass transit, clean energy tax incentives and many other initiatives. The negotiations with Republicans — who object to the plan's steep price tag and expansive definition of infrastructure — come ahead of November's critical United Nations climate summit. What they're saying: "Because of the importance of American leadership on climate**,** the rest of the world is definitely watching what happens on Capitol Hill," said the Environmental Defense Fund's Nathaniel Keohane. Keohane, who leads EDF's climate program, said major U.S. investments will bolster the country's economy and competitiveness. But they're also consequential internationally, he said. "The more the U.S. can demonstrate leadership — not only in the ambition of its targets but in the ambition of its implementation and the seriousness of its implementation — the more likely we are to see the rest of the world stepping into its ambition and accelerating its own climate action," he said. Catch up fast: In April the White House set a voluntary target under the Paris Agreement of cutting U.S. emissions by 50% below 2005 levels by 2030.But that's much harder to achieve absent Capitol Hill approval of new investments and incentives. The Atlantic Council's Margaret Jackson said Biden's climate initiatives thus far have borne some fruit, pointing to several nations strengthening their Paris targets. But Jackson, who has written about the importance of congressional action, also tells Axios: "U.S. allies and partners are still somewhat skeptical in terms of how much this administration can really accomplish, and will it be lasting."

#### **Warming causes extinction.**

**Xu 17** [Yangyang Xu 17, Assistant Professor of Atmospheric Sciences at Texas A&M University; and Veerabhadran Ramanathan, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography, University of California, San Diego, 9/26/17, “Well below 2 °C: Mitigation strategies for avoiding dangerous to catastrophic climate changes,” Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 39, p. 10315-10323]

We are proposing the following extension to the DAI risk categorization: warming greater than 1.5 °C as “dangerous”; warming greater than 3 °C as “catastrophic?”; and warming in excess of 5 °C as “unknown??,” with the understanding that changes of this magnitude, not experienced in the last 20+ million years, pose existential threats to a majority of the population. The question mark denotes the subjective nature of our deduction and the fact that catastrophe can strike at even lower warming levels. The justifications for the proposed extension to risk categorization are given below. From the IPCC burning embers diagram and from the language of the Paris Agreement, we infer that the DAI begins at warming greater than 1.5 °C. Our criteria for extending the risk category beyond DAI include the potential risks of climate change to the physical climate system, the ecosystem, human health, and species extinction. Let us first consider the category of catastrophic (3 to 5 °C warming). The first major concern is the issue of tipping points. Several studies (48, 49) have concluded that 3 to 5 °C global warming is likely to be the threshold for tipping points such as the collapse of the western Antarctic ice sheet, shutdown of deep water circulation in the North Atlantic, dieback of Amazon rainforests as well as boreal forests, and collapse of the West African monsoon, among others. While natural scientists refer to these as abrupt and irreversible climate changes, economists refer to them as catastrophic events (49). Warming of such magnitudes also has catastrophic human health effects. Many recent studies (50, 51) have focused on the direct influence of extreme events such as heat waves on public health by evaluating exposure to heat stress and hyperthermia. It has been estimated that the likelihood of extreme events (defined as 3-sigma events), including heat waves, has increased 10-fold in the recent decades (52). Human beings are extremely sensitive to heat stress. For example, the 2013 European heat wave led to about 70,000 premature mortalities (53). The major finding of a recent study (51) is that, currently, about 13.6% of land area with a population of 30.6% is exposed to deadly heat. The authors of that study defined deadly heat as exceeding a threshold of temperature as well as humidity. The thresholds were determined from numerous heat wave events and data for mortalities attributed to heat waves. According to this study, a 2 °C warming would double the land area subject to deadly heat and expose 48% of the population. A 4 °C warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented, such as providing air conditioning to the entire population or a massive relocation of most of the population to safer climates. Climate risks can vary markedly depending on the socioeconomic status and culture of the population, and so we must take up the question of “dangerous to whom?” (54). Our discussion in this study is focused more on people and not on the ecosystem, and even with this limited scope, there are multitudes of categories of people. We will focus on the poorest 3 billion people living mostly in tropical rural areas, who are still relying on 18th-century technologies for meeting basic needs such as cooking and heating. Their contribution to CO2 pollution is roughly 5% compared with the 50% contribution by the wealthiest 1 billion (55). This bottom 3 billion population comprises mostly subsistent farmers, whose livelihood will be severely impacted, if not destroyed, with a one- to five-year megadrought, heat waves, or heavy floods; for those among the bottom 3 billion of the world’s population who are living in coastal areas, a 1- to 2-m rise in sea level (likely with a warming in excess of 3 °C) poses **existential threat** if they do not relocate or migrate. It has been estimated that several hundred million people would be subject to famine with warming in excess of 4 °C (54). However, there has essentially been no discussion on warming beyond 5 °C. Climate change-induced species extinction is one major concern with warming of such large magnitudes (>5 °C). The current rate of loss of species is ∼1,000-fold the historical rate, due largely to habitat destruction. At this rate, about 25% of species are in danger of extinction in the coming decades (56). Global warming of 6 °C or more (accompanied by increase in ocean acidity due to increased CO2) can act as a major force multiplier and expose as much as 90% of species to the dangers of extinction (57). The bodily harms combined with climate change-forced species destruction, biodiversity loss, and threats to water and food security, as summarized recently (58), motivated us to categorize warming beyond 5 °C as unknown??, implying the possibility of existential threats. Fig. 2 displays these three risk categorizations (vertical dashed lines).

### **Adv 2– AI**

#### **US companies are on track to develop lethal AI weapons now.**

**Dellinger 19** [AJ Dellinger, 8-22-2019, "Could advancements in AI eventually lead to ‘Terminator’-style killer robots?," Mic, <https://www.mic.com/p/microsoft-amazon-other-big-tech-companies-are-putting-us-at-risk-of-a-killer-ai-study-says-18689833>] //PT

Tech companies are happy to tout their innovations and latest developments, but one organization is warning that not all advancements are good ones. Dutch nonprofit PAX, an organization that advocates for peace, recently looked into how the tech sector is handling the development of artificial intelligence and its potential to become an automated destructive force that could turn on humanity. What it found is that just seven of the 50 companies it investigated partake in "best practices" to mitigate the risk of an eventual AI apocalypse. Twenty-one firms, including the likes of [Amazon and Microsoft, were marked as "high concern."](https://www.paxforpeace.nl/publications/all-publications/dont-be-evil) PAX's research focused on answering three different questions: Is the company developing technology relevant to the potential development of lethal autonomous weapons, is the firm working on military projects that may enable deadly force, and has the company committed to not contributing to the development of autonomous weapons? Companies were given high marks for committing themselves to not contributing to the development of potentially deadly machines. Meanwhile, companies that freely work alongside the military without a clear plan in place to prevent their technology from being used for lethal purposes received demerits. Given that, it's not surprising that Amazon and Microsoft would sit atop the list of companies that just may push us toward a future filled with killer robots. The two have spent the better part of the last year locked in an ongoing competition to land a massive government contract to [build the Pentagon a "war cloud"](https://www.mic.com/p/the-joint-enterprise-defense-infrastructure-plan-from-the-us-department-of-defense-could-be-derailed-by-legal-challenges-18180447) known as the [Joint Enterprise Defense Infrastructure](https://www.fbo.gov/index?s=opportunity&mode=form&id=f7f1d0314ec7c83cd0ace1636b5474a1&tab=core&_cview=0), or JEDI. The project would equip the United States Department of Defense with a cloud infrastructure that would allow branches of the military to freely share information, from sensitive documents to mission plans, across multiple theaters. The appeal of tackling the proposal is clear for Amazon and Microsoft: it carries a $10 billion contract that will be rewarded to the company that can provide the service the government is looking for. But, in winning the contract and building the war-enabling technology that the military wants, one of these companies will undoubtedly contribute to the deaths of humans. U.S. Department of Defense Chief Management Officer John H. Gibson II has made that abundantly clear in talking about JEDI, stating publicly that "[This program is truly about increasing the lethality of our department](https://www.defense.gov/Newsroom/News/Article/Article/1466699/dod-officials-highlight-role-of-cloud-infrastructure-in-supporting-warfighters/)." The criticisms of the companies extend beyond just their interest in taking on the JEDI project. Microsoft has taken heat in the past for [providing its technology to the U.S. Immigration and Customs Enforcement](https://devblogs.microsoft.com/azuregov/federal-agencies-continue-to-advance-capabilities-with-azure-government/) (ICE), including providing the organization tasked with separating migrant children from their families with "facial recognition and identification" tools. Last year, the company called the separation policy "abhorrent" and said its [technology isn't being used to enable those practices](https://slate.com/technology/2018/06/microsoft-is-not-helping-ice-with-any-projects-relating-to-family-separation-ceo-claims.html), though it shied away from canceling ongoing work with ICE or from taking on future contracts with the government agency. Microsoft has [urged Congress to take steps to regulate facial recognition technology](https://www.npr.org/2018/12/06/674310978/microsoft-urges-congress-to-regulate-facial-recognition-technology) before it is put to use in overzealous and potentially harmful ways, so points for recognizing the risk even if the company is profiting off it anyway. While Microsoft has at least shown a little bit of caution when it comes to deploying its technology, Amazon has been a bit more brazen in offering up facial recognition services. Earlier this year, Andy Jassy — the CEO of Amazon Web Services (AWS) — said the company would offer its technology to "[any government department that is following the law](https://venturebeat.com/2019/06/10/amazon-will-serve-any-government-agency-with-facial-recognition-technology-so-long-as-its-legal/)." That's pretty broad, and since the government has a pretty powerful hand in deciding what exactly the law is, it can be read as Amazon offering its facial recognition project Rekognition up carte blanche to any agency that wants to use it. The company hasn't been shy about [selling Rekognition to law enforcement agencies](https://www.mic.com/articles/189511/amazon-sold-facial-recognition-software-to-law-enforcement-heres-why-some-say-its-dangerous) across the country despite concerns it contributes to the invasion of the public's right to privacy. It also hasn't been particularly dissuaded from profiting off the technology even though it's [actually pretty terrible at identifying people](https://www.mic.com/articles/190457/in-an-aclu-test-amazons-facial-recognition-tech-wrongly-matched-mugshots-to-28-members-of-congress) and [displays a clear bias when attempting to identify women and people of color](https://www.theverge.com/2019/1/25/18197137/amazon-rekognition-facial-recognition-bias-race-gender). Add to that the concern that it may one day contribute to the development of automated killing machines, as PAX would suggest, and you have a real recipe for something awful.

#### **These companies will sell AI weapons to the US military which will ensure the AI arms race – but workers have empirically caused them to back out of weapons development.**

**Skolnik 3/16** [Jon Skolnik, 3-16-2021, "Big Tech is fueling an AI "arms race": It could be terrifying — or just a giant scam," Salon, <https://www.salon.com/2021/03/16/big-tech-is-fueling-an-ai-arms-race-it-could-be-terrifying--or-just-a-giant-scam/>] //PT

Early in the 2020 presidential campaign, Democratic candidates Pete Buttigieg and Andrew Yang [tried to build political momentum](https://venturebeat.com/2019/11/21/buttigieg-and-yang-say-ai-is-essential-to-u-s-national-security/) around the claim that the United States is losing ground in a new arms race with China — not over nuclear missiles or conventional arms but artificial intelligence, or AI. Around the same time, former President Trump [launched](https://thebulletin.org/2019/02/trump-orders-some-sort-of-vague-action-in-the-ai-arms-race/) the American AI Initiative, which sought to marshal AI technologies against "adversarial nations for the security of our economy and our nation," as Trump's top technology adviser [put it](https://www.wired.com/story/a-national-strategy-for-ai/). Buttigieg, Yang and Trump may have agreed about little else, but they appeared to go along with the nonpartisan think tanks and public policy organizations –– many of them funded by weapons contractors –– that have worked to promote the supposedly alarming possibility that China and Russia may be "beating" the U.S. in defense applications for AI. Hawkish or "centrist" research organizations like the [Center for New American Security](https://www.cnas.org/publications/reports/understanding-chinas-ai-strategy) (CNAS), the [Brookings Institution](https://www.brookings.edu/blog/order-from-chaos/2018/11/06/artificial-intelligence-and-the-security-dilemma/) and the [Heritage Foundation](https://www.heritage.org/technology/commentary/america-must-counter-chinas-military-civil-union), despite their policy and ideological differences in many areas, have argued that America must ratchet up spending on AI research and development, lest it lose its place as No. 1. Just last week, the National Security Commission on Artificial Intelligence (NSCAI) published a sweeping 756-page [report](https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf), culminating two years of work following the 2019 National Defense Authorization Act, asking Congress to authorize a $40 billion federal investment in AI research and development, which the NSCAI calls "a modest down payment." The commission also urged President Biden to reject the push for a global ban on AI-enabled autonomous weapons — a ban proposed by thousands of scientists and thought leaders in an [open letter](https://www.vice.com/en/article/nzep5k/thousands-of-scientists-say-we-need-a-global-ban-on-autonomous-weapons) written in 2015. Concerned about the threat of increasing AI sophistication in Russia and China, the commission warned lawmakers that America "will not be able to defend against AI-enabled threats without ubiquitous AI capabilities and new warfighting paradigms." It offered a laundry list of recommendations to put these paradigms into action, including a "Steering Committee on Emerging Technology" within the Defense Department, an accredited university designed to produce and recruit tech talent for the defense sector, and a ramped-up investment in semiconductor manufacturing designed to keep the U.S. "two generations" ahead of China. One question, however, was not directly answered in the NSCAI's gigantic report or in all the think-tank policy papers that preceded it: Is this science fiction-flavored arms race against largely imaginary Chinese and Russian techno-weapons of the future really necessary? Is it remotely a good idea, or likely to improve the lives of any human beings on the planet? (Excepting, that is, those who stand to profit from it.) Jim Naureckas, the editor of Fairness and Accuracy in Reporting (FAIR) and a frequent critic of military spending, told Salon in an interview that framing of AI development as an "arms race" is irresponsible, but in the larger sweep of history is also nothing new. "The whole military industry is driven by fear as a motivator," he said. "There's a logic to an arms race that's different from the logic of arms control." After its release, the NSCAI report was greeted with a deluge of largely uncritical media coverage, most of it echoing concerns about the U.S. losing the "AI arms race" — a term not mentioned in the report itself, but certainly evoked by its framing. "Unless America acts now," a Washington Post [headline](https://www.washingtonpost.com/opinions/unless-america-acts-now-china-could-trounce-it-in-artificial-intelligence/2021/03/09/81f99508-805b-11eb-9ca6-54e187ee4939_story.html) read, "China could trounce it in artificial intelligence." "Which country is emerging as the global leader in AI?" [echoed](https://techhq.com/2021/03/which-country-is-emerging-as-the-global-leader-in-ai/) TechHQ. "America wakes up to the China threat," [chimed](https://www.wsj.com/articles/america-wakes-up-to-the-china-threat-11615311587) the Wall Street Journal. As Naureckas pointed out, the notion that that the U.S. will soon fall behind its global competitors in military technology is a tried-and-true scare tactic, employed at various times in slightly different registers by both Democrats and Republicans. In reality, U.S. military spending remains mind-bogglingly high. For the 2020 fiscal year, the Trump administration [approved](https://www.cnbc.com/2019/12/21/trump-signs-738-billion-defense-bill.html) a military budget of $738 billion, a $21 billion increase from the previous year and it passed with overwhelming bipartisan support, facing only 48 "no" votes in the House and eight in the Senate. In 2019, the militarized budget accounted for [64.5 percent](https://www.nationalpriorities.org/analysis/2020/militarized-budget-2020/) of all federal discretionary spending. The U.S. has 800 military bases on foreign soil, far more than any other country in the world. According to [Military.com](https://www.military.com/daily-news/2020/02/24/5-most-powerful-armies-world.html#:~:text=In%20what%20shouldn't%20be,and%20742%20special%20mission%20aircraft.), America is the world leader in every significant category of military hardware, and has roughly 1.4 million active-duty military personnel. In 2020, the Stockholm International Peace Research Institute (SIPRI) [found](https://www.pgpf.org/blog/2020/05/the-united-states-spends-more-on-defense-than-the-next-10-countries-combined) that the U.S. allocated more to its military budget than the next 10 nations combined. American military spending is about 2.7 times greater than that of China — which has a much larger population — and more than 10 times higher than Russia's, or that of any other single country. Meanwhile, bureaucratic and operational waste within the defense budget abound. In 2016, for example, it was discovered that the Pentagon had [buried an internal study](https://www.washingtonpost.com/investigations/pentagon-buries-evidence-of-125-billion-in-bureaucratic-waste/2016/12/05/e0668c76-9af6-11e6-a0ed-ab0774c1eaa5_story.html) finding that it had spent some $125 billion in wasteful business operations. More recently, it was [discovered](https://www.vice.com/en/article/939kxa/some-things-we-could-have-done-with-the-billions-wasted-on-a-broken-f-35) that the Pentagon's F-35 fighter jet program — which costed taxpayers somewhere in the neighborhood of $1.5 trillion — has been riddled with software glitches and operational failures since 2006, rendering an untold number of fighter jets (each one costing $100 million) not flight-ready. In spite of all its administrative bloat and operational dysfunction, the military remains exceptionally well-funded. Why, then, would the NSCAI insist it needs billions more for a hypothetical arms race against badly underfunded opponents? The report's authors may tell a better story than the report itself. Jack Poulson, a former Google employee who [resigned](https://theintercept.com/2018/09/13/google-china-search-engine-employee-resigns/) over the company's plan to launch a censored version of its search engine in China, told Salon that profit motives is deeply entrenched in the NSCAI report. "It should not come as a surprise that a commission packed with tech billionaires would call for increased intellectual property protections, oppose regulation (including on Lethal Autonomous Weapons), propose toothless ethics principles, and call for more federal funding of their industry," Poulson said in a statement. Indeed, many commission members are past and present tech executives of companies on the fore of AI — companies that have much to gain from future contracting deals with the Pentagon. The commission's chair, for example, is Eric Schmidt, the former CEO of Google, who remains — as Poulson pointed out — a major shareholder in Alphabet, Google's parent company. Google's head of AI, Andrew Moore, is also a member of the NSCAI. Google already has an extensive history of working with the Pentagon. According to The Intercept, in a federally-funded $70 million program called Project Maven, Google [developed](https://theintercept.com/2018/03/06/google-is-quietly-providing-ai-technology-for-drone-strike-targeting-project/) "algorithmic warfare initiative to apply artificial intelligence solutions to drone targeting." The company [expecting](https://www.theverge.com/2018/6/1/17418406/google-maven-drone-imagery-ai-contract-expire) that revenue would steadily rise from $15 million to $250 million a year for such defense projects. In April of 2018, however, 3,000 Google employees signed an open letter decrying the company's involvement in defense technology, a move that eventually led to Google's ultimate decision to back out of the deal. Schmidt strongly objected to Google's decision, calling it an "[aberration](https://nypost.com/2021/03/02/ai-panel-urges-us-to-boost-tech-skills-amid-chinas-rise/)" within the tech industry, which he felt was otherwise inclined to collaborate with the Defense Department. Former Undersecretary of the Navy Robert Work, the vice chairman of NSCAI, called Google's decision "hypocritical," [using language](https://www.voanews.com/silicon-valley-technology/former-us-defense-official-says-google-has-stepped-moral-hazard) that suggested a new cold war is already underway: "Anything that's going on in the AI center in China is going to the Chinese government and then will ultimately end up in the hands of the Chinese military." Other members of the commission include Oracle CEO Safra Catz, Microsoft chief scientific officer Eric Horvitz, and Andrew Jassy, the future CEO of Amazon Web Services, all of whom received cloud awards as part of the CIA's Commercial Cloud Enterprise (C2E), as Poulson noted. Oracle, Amazon and Microsoft, in fact, are currently involved in an acrimonious legal battle over a $10 billion cloud-computing contract called the Joint Enterprise Defense Initiative (JEDI). The deal was initially considered to be "gift-wrapped" for Amazon until Oracle butted in, [alleging improprieties](https://www.extremetech.com/computing/320577-pentagon-may-dump-10-billion-jedi-program-over-microsoft-amazon-fight). In an odd turn of events, the Pentagon awarded the contract to Microsoft, prompting Amazon to sue the federal government for anti-Amazon bias, based on ex-President Trump's overheated rhetoric. When it comes to securing Big Tech's enormous future contracts with the Pentagon, it appears that Jassy, Catz and Horvitz have set aside their mutual grievances for the time being Other board members of NSCAI include Gilman Louie and Christopher Darby, who are the founder and vice president (respectively) of a CIA-funded nonprofit called In-Q-Tel, which invests money in private companies who are developing technologies that might be useful to the intelligence community. According to a Wall Street Journal [investigation](https://www.wsj.com/articles/the-cias-venture-capital-firm-like-its-sponsor-operates-in-the-shadows-1472587352) from 2015, half of In-Q-Tel's trustees were financially connected to private companies in which In-Q-Tel had invested. Another board member, William Mark, a vice president of SRI International, has served on the Defense Advanced Research Projects Agency (DARPA), a government-run program that [partners with a variety of private companies and research institutions](http://www.darpa.mil/about-us/about-darpa) to "make pivotal investments in breakthrough technologies for national security." DARPA has awarded SRI numerous contracts for the development of speech recognition, translation and, most recently, [deep-fake recognition systems](https://techcrunch.com/2018/04/30/deepfakes-fake-videos-darpa-sri-international-media-forensics/). In other words, nearly everyone involved in preparing or supporting the NSCAI report would seem likely to benefit from the perception that the U.S. is falling behind other nations in vital defense technology. The Defense Department, Poulson told Salon, "prefers to run the race as if it is losing — which happens to increase military budgets, justify post-government consulting careers and help tech CEOs oppose regulation." It's only natural that government authorities would seek out industry experts to consult on AI projects — it's a fast-developing field that almost no one outside the tech world understands. Poulson wonders, however, "whether the U.S. will give human rights organizations — such as Human Rights Watch and the Campaign to Stop Killer Robots — as much of a seat at the table as it does tech billionaires." The very fact that the NSCAI is stacked with panel members with an obvious incentive to weaponize new technologies raises the question whether there needs to be an AI "arms race" at all. That term, of course, harkens back to Cold War hysteria surrounding the threat of nuclear annihilation, which led U.S. lawmakers to grow unduly concerned with the "missile gap," a widely held misconception that the Soviet Union was outpacing the U.S. with superior ballistic missile capabilities. (As intelligence sources knew even at the time, the Soviet nuclear arsenal was in bad shape and much smaller than advertised.) Arms control strategies, in fact, may be a more effective strategy in the AI realm, just as it was with nuclear missiles, especially given that America already collaborates heavily with China in AI research. As Graham Webster [wrote recently](https://www.technologyreview.com/2018/12/19/138211/the-us-and-china-arent-in-a-cold-war-so-stop-calling-it-that/) in MIT Tech Review: Unlike the US and USSR, in which science and technology developed on largely independent tracks, the US and China are part of a globally intertwined ecosystem. Even if the US and China cut off trade with each other, both countries would still have to worry about security risks from components, since risks along the supply chain exist everywhere. [For example](https://www.newamerica.org/cybersecurity-initiative/reports/essay-reframing-the-us-china-ai-arms-race/problem-1-arms-race-framing-is-winner-takes-all), Alibaba, a tech giant on the forefront of AI, has multiple offices in the U.S., and Google AI chief Jeff Dean is an adviser at China's Tsinghua University, which opened an Institute for Artificial Intelligence in June 2018. Stanford University's Artificial Intelligence lab has a partnership with one of China's biggest retailers. In other words, an arms race in which the two nations are locked in silos of information, research and development is not just ethically dubious but logistically impossible. Will China and Russia explore uses of AI in weapons of the future? Almost certainly — both countries have already [signaled](https://www.theverge.com/2017/9/4/16251226/russia-ai-putin-rule-the-world) movement in that direction. But if American politicians and scientists want to maximize the potential of AI, framing its development in terms of an international "arms race" seems like a strategic and philosophical mistake on a huge scale. AI has the potential to revolutionize [health care](https://www.healthcareitnews.com/news/emea/uk-hospital-first-use-ai-cancer-treatment-tool#:~:text=The%20technology%20computes%20hospital%20data,on%20the%20quality%20of%20care.), [education](https://www.nytimes.com/2021/02/23/technology/ai-innovation-privacy-seniors-education.html), [climate science](https://www.forbes.com/sites/bernardmarr/2021/01/04/how-artificial-intelligence-can-power-climate-change-strategy/?sh=69174b6a3482) and many other fields — and those things all play a fundamental role in national security. But these new technologies will not make America more secure if they are understood as weapons of international combat.

#### **AI weapon arms racing causes nuclear war – lack of verification methods and uncertainty about technological trajectory ensures racing likely to escalate.**

**Horowitz 19** [Michael C. Horowitz, Political Science Professor, Director Perry World House, and Perry Professor at the University of Pennsylvania, author of the Diffusion of Power: Causes and Consequences for International Politics and co-author of Why Leaders Fight, “When Speed Skills: Lethal Autonomous Weapon Systems, deterrence and stability, <https://sci-hub.st/https://www.tandfonline.com/doi/abs/10.1080/01402390.2019.1621174?src=recsys&journalCode=fjss20>]

55 All arms races share an underlying political dynamic whereby fear of developments by one or multiple other actors, andthe inability to verify that those actors are not developing particular capabilities, fuels more intense development of new weapon systems than would happen otherwise.56 An arms race in the area of machine autonomy would be no different in that dimension. The root would be inherently political.57 Actors would also have to believe that they would gain an advantage from the developing LAWS, or least be at a significant disadvantage if they did not develop those weapon systems. Jervis argues that arms races occur due to a security dilemma when states have **the** ability to measure each other’s capabilities, but nottheir intentions.58 The opacity surrounding LAWS development might generate increased riskfor arms competition because of potential opacity about capabilities, in addition to the ‘normal’ opacity that exists about intentions. First, it will be extremely difficult for states to credibly demonstrate autonomous weapon capabilities. The difference between a remotely piloted system and an autonomous system is software, not hardware, meaning verification that a given country is operating an autonomous system at all would be difficult. Second, uncertainty about the technological trajectory of machine learning and specific military applications means that countries might have significant uncertainty about other countries’ capabilities. Thus, countries might invest a lot in AI applications to military systems due to fear of what others are developing. The heightened role of uncertainty about what other countries are developing would make an LAWS arms competition different than many historical arms races – for example, the Anglo-German naval arms race prior to World War I. In the Anglo-German naval arms race case, both sides could see the ships being produced by the other side because those ships left port for testing, and were subject to reporting by spies who could observe construction patterns.59 Even though there was some uncertainty about the specific capabilities of battleships and battlecruisers, each side could count the number and size of the guns deployed on each ship. **Third, the rules of engagement for LAWS would also likely be unknown – and use of an LAWS by a state in one engagement might not generate predictability, since a state could change the programming of the system prior to the next engagement.** Thus, opacity surrounding AI capabilities could, potentially, lead to worse case assumptions about capability development by potential adversaries, thus making arms race dynamics more likely. Research on bargaining and war also suggests that uncertainty about capabilities makes it harder for countries to come to agreements when they enter into disputes. Private information about military capabilities means both sides can believe they are likely to win if a dispute escalates.60 The dispute then becomes harder to resolve and more likely to escalate. To the extent that machine learning systems generate more uncertainty due to their opacity, an arms race over machine learning systems might therefore be somewhat more likely to escalate. The extent of the effect would be difficult to determine, however.

#### **Nuclear war causes extinction – ozone layer loss, firestorms, and agricultural disruption.**

**Starr 17** (Steven; Steven Starr is the director of the University of Missouri’s Clinical Laboratory Science Program, as well as a senior scientist at the Physicians for Social Responsibility. He has been published in the Bulletin of the Atomic Scientists and the Strategic Arms Reduction (STAR) website of the Moscow Institute of Physics and Technology; Jan 09, 2017; “Turning a Blind Eye Towards Armageddon — U.S. Leaders Reject Nuclear Winter Studies”; Federation of American Scientists; https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies/; DOA December 8, 2019; JPark)

The detonation of an atomic bomb with this explosive power will instantly ignite fires over a surface area of three to five square miles. In the recent studies, the scientists calculated that the blast, fire, and radiation from a war fought with 100 atomic bombs could produce direct fatalities comparable to all of those worldwide in World War II, or to those once estimated for a “counterforce” nuclear war between the superpowers. However, the long-term environmental effects of the war could significantly disrupt the global weather for at least a decade, which would likely result in a vast global famine. The scientists predicted that nuclear firestorms in the burning cities would cause at least five million tons of black carbon smoke to quickly rise above cloud level into the stratosphere, where it could not be rained out. The smoke would circle the Earth in less than two weeks and would form a global stratospheric smoke layer that would remain for more than a decade. The smoke would absorb warming sunlight, which would heat the smoke to temperatures near the boiling point of water, producing ozone losses of 20 to 50 percent over populated areas. This would almost double the amount of UV-B reaching the most populated regions of the mid-latitudes, and it would create UV-B indices unprecedented in human history. In North America and Central Europe, the time required to get a painful sunburn at mid-day in June could decrease to as little as six minutes for fair-skinned individuals. As the smoke layer blocked warming sunlight from reaching the Earth’s surface, it would produce the coldest average surface temperatures in the last 1,000 years. The scientists calculated that global food production would decrease by 20 to 40 percent during a five-year period following such a war. Medical experts have predicted that the shortening of growing seasons and corresponding decreases in agricultural production could cause up to two billion people to perish from famine. The climatologists also investigated the effects of a nuclear war fought with the vastly more powerful modern thermonuclear weapons possessed by the United States, Russia, China, France, and England. Some of the thermonuclear weapons constructed during the 1950s and 1960s were 1,000 times more powerful than an atomic bomb. During the last 30 years, the average size of thermonuclear or “strategic” nuclear weapons has decreased. Yet today, each of the approximately 3,540 strategic weapons deployed by the United States and Russia is seven to 80 times more powerful than the atomic bombs modeled in the India-Pakistan study. The smallest strategic nuclear weapon has an explosive power of 100,000 tons of TNT, compared to an atomic bomb with an average explosive power of 15,000 tons of TNT. Strategic nuclear weapons produce much larger nuclear firestorms than do atomic bombs. For example, a standard Russian 800-kiloton warhead, on an average day, will ignite fires covering a surface area of 90 to 152 square miles. A war fought with hundreds or thousands of U.S. and Russian strategic nuclear weapons would ignite immense nuclear firestorms covering land surface areas of many thousands or tens of thousands of square miles. The scientists calculated that these fires would produce up to 180 million tons of black carbon soot and smoke, which would form a dense, global stratospheric smoke layer. The smoke would remain in the stratosphere for 10 to 20 years, and it would block as much as 70 percent of sunlight from reaching the surface of the Northern Hemisphere and 35 percent from the Southern Hemisphere. So much sunlight would be blocked by the smoke that the noonday sun would resemble a full moon at midnight. Under such conditions, it would only require a matter of days or weeks for daily minimum temperatures to fall below freezing in the largest agricultural areas of the Northern Hemisphere, where freezing temperatures would occur every day for a period of between one to more than two years. Average surface temperatures would become colder than those experienced 18,000 years ago at the height of the last Ice Age, and the prolonged cold would cause average rainfall to decrease by up to 90%. Growing seasons would be completely eliminated for more than a decade; it would be too cold and dark to grow food crops, which would doom the majority of the human population.

### **Solvency**

#### **Plan: The United States Government ought to recognize the unconditional right of big tech workers to strike.**

#### **Definition of unconditional right to strike:**

**NLRB 85** [National Labor Relations Board; “Legislative History of the Labor Management Relations Act, 1947: Volume 1,” Jan 1985; <https://play.google.com/store/books/details?id=7o1tA__v4xwC&rdid=book-7o1tA__v4xwC&rdot=1>]

\*\*Edited for gendered language

As for the so-called absolute or **unconditional** right to strike—there are no absolute rights that do not have their **corresponding** **responsibilities**. Under our American Anglo-Saxon system, each individual is **entitled** to the maximum of freedom, provided however (and this provision is of first importance), his [their] freedom has **due** **regard** for the **rights** and **freedoms** of **others**. The very **safeguard** of our freedoms is the recognition of this fundamental principle. I take **issue** very definitely with the suggestion that there is an absolute and **unconditional** **right** to concerted action (which after all is what the **strike** is) which **endangers** the **health** and **welfare** of our people in order to attain a **selfish** **end**.

#### **Tech worker strikes lead to quick, concrete, climate action from policymakers and tech leaders.**

**Baca and Greene ’19** [Amazon, Google, other tech employees protest in support of climate action, Marie Baca and Jay Greene, <https://www.washingtonpost.com/technology/2019/09/20/amazon-google-other-tech-employees-protest-support-climate-action/>, September 20 2019, Education: Stanford University, BA in Human Biology; Stanford University, MA in Communications, Graduate Program in Journalism Marie C. Baca was a breaking news technology and business reporter in San Francisco. She left The Post in December 2019, Education: Macalester College, BA in English; Columbia University, MS in Journalism Jay Greene is a reporter for The Washington Post who is focused on technology coverage in the Pacific Northwest.] [SS]

Thousands of workers at the nation’s largest tech companies were expected to walk off their jobs Friday to urge industry and world leaders to address climate change more aggressively, part of a larger wave of demonstrations expected to draw millions of people across the globe. The group Amazon Employees for Climate Justice said more than 1,800 Amazon employees in 25 cities pledged to walk out. Google Workers for Action on Climate tweeted that they expected about 700 workers to strike as of Thursday. Similar groups that said they were representing employees at Microsoft, Facebook, Twitter, Square and other major tech companies tweeted that they also expected significant numbers of employees to walk out. Hundreds gathered Friday outside Amazon’s headquarters in downtown Seattle as part of the demonstrations. Participants chanted, “Hey hey, ho ho, fossil fuels have got to go” and held signs with messages such as “Amazon, Let’s lead. Zero Emissions By 2030.” Rebecca Sheppard, 28, works in Amazon’s air, science and tech group to make the online retail giant’s planes more efficient. She said she thought about quitting last year over her concerns about Amazon’s massive carbon footprint, but colleagues discouraged her, saying she could effect change by sticking around. “We’ve just got to double down,” she said about employee efforts to produce change. (Amazon founder and chief executive Jeff Bezos owns The Washington Post.) ‘I hope the politicians hear us’: Millions of youth around the world strike for action The strike is being held in advance of a Monday climate summit at the United Nations. U.N. Secretary-General António Guterres has insisted that instead of bringing “fancy speeches” with them to the meeting, the countries must offer concrete commitments such as reaching net zero emissions by 2050 or eliminating the construction of coal-fired power plants. Strike organizers expected more than 1,000 events to take place in the United States alone. The tech workers joined millions of youths from more than 150 countries around the world who skipped school Friday in solidarity with the movement. Among them was 16-year-old Swedish climate activist Greta Thunberg, who has given a speech before the United Nations, met with political and business leaders, and has been nominated for a Nobel Peace Prize for her work. Facebook released a statement Friday expressing its support for employees who chose to walk out and said that the company is “building sustainability into our operations as well as engaging the global community on this important issue with our products.” Microsoft declined to comment. Google, Twitter and Square were not immediately available to comment. At Amazon, the walkout came a day after **Bezos announced a “Climate Pledge” that would require signatories to meet the goals of the Paris climate agreement a decade early. The pledge also requires regular measuring and reporting of emissions, as well as obtaining net zero carbon across businesses by 2040, am**ong other stipulations. U.S. takes a low profile as nations gather in New York to debate steps to combat climate change Bezos said Amazon would be the first company to sign the pledge. Critics, who have long claimed Amazon does little to offset the emissions it produces, say the pact lacks transparency and standardized rules for what is measured and reported. Amazon declined to comment on the walkout. In Seattle, workers who walked out held signs that opposed deals with gas and oil companies. The crowd booed when a speaker noted that Amazon funds climate-denying lobbyists. There was also a speaker from Google. Sarah Read, a user experience researcher with Prime Video, said Thursday’s announcement shows employees are having an impact. She said she believes the Climate Pact is related to an employee-sponsored shareholder resolution that would have required the company create a plan to address climate change, a resolution that failed in spring. Amazon CEO Jeff Bezos announces new ‘Climate Pledge’ ahead of employee protests “It’s a direct response to Amazon employees standing up, speaking out and saying this is important to them,” Read said.

## **Framing**

#### **The standard is maximizing expected well-being or act hedonistic util.**

#### **Pleasure and pain are intrinsically valueable and disvalueable – everything else regresses. Evolutionary knowledge is reliable – broad consensus and robust neuroscience prove.**

**Blum et al. 18**

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**Pleasure** is not only one of the three primary reward functions but it also **defines reward.** As homeostasis explains the functions of only a limited number of rewards, the principal reason why particular stimuli, objects, events, situations, and activities are rewarding may be due to pleasure. This applies first of all to sex and to the primary homeostatic rewards of food and liquid and extends to money, taste, beauty, social encounters and nonmaterial, internally set, and intrinsic rewards. Pleasure, as the primary effect of rewards, drives the prime reward functions of learning, approach behavior, and decision making and provides the **basis for hedonic theories** of reward function. We are attracted by most rewards and exert intense efforts to obtain them, just because they are enjoyable [10]. Pleasure is a passive reaction that derives from the experience or prediction of reward and may lead to a long-lasting state of happiness. The word happiness is difficult to define. In fact, just obtaining physical pleasure may not be enough. One key to happiness involves a network of good friends. However, it is not obvious how the higher forms of satisfaction and pleasure are related to an ice cream cone, or to your team winning a sporting event. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure [14]. Pleasure as a hallmark of reward is sufficient for defining a reward, but it may not be necessary. A reward may generate positive learning and approach behavior simply because it contains substances that are essential for body function. When we are hungry, we may eat bad and unpleasant meals. A monkey who receives hundreds of small drops of water every morning in the laboratory is unlikely to feel a rush of pleasure every time it gets the 0.1 ml. Nevertheless, with these precautions in mind, we may define any stimulus, object, event, activity, or situation that has the potential to produce pleasure as a reward. In the context of reward deficiency or for disorders of addiction, homeostasis pursues pharmacological treatments: drugs to treat drug addiction, obesity, and other compulsive behaviors. The theory of allostasis suggests broader approaches - such as re-expanding the range of possible pleasures and providing opportunities to expend effort in their pursuit. [15]. It is noteworthy, the first animal studies eliciting approach behavior by electrical brain stimulation interpreted their findings as a discovery of the brain’s pleasure centers [16] which were later partly associated with midbrain dopamine neurons [17–19] despite the notorious difficulties of identifying emotions in animals. Evolutionary theories of pleasure: The love connection BO:D Charles Darwin and other biological scientists that have examined the biological evolution and its basic principles found various mechanisms that steer behavior and biological development. Besides their theory on natural selection, it was particularly the sexual selection process that gained significance in the latter context over the last century, especially when it comes to the question of what makes us “what we are,” i.e., human. However, the capacity to sexually select and evolve is not at all a human accomplishment alone or a sign of our uniqueness; yet, we humans, as it seems, are ingenious in fooling ourselves and others–when we are in love or desperately search for it. It is well established that modern biological theory conjectures that **organisms are** the **result of evolutionary competition.** In fact, Richard Dawkins stresses gene survival and propagation as the basic mechanism of life [20]. Only genes that lead to the fittest phenotype will make it. It is noteworthy that the phenotype is selected based on behavior that maximizes gene propagation. To do so, the phenotype must survive and generate offspring, and be better at it than its competitors. Thus, the ultimate, distal function of rewards is to increase evolutionary fitness by ensuring the survival of the organism and reproduction. It is agreed that learning, approach, economic decisions, and positive emotions are the proximal functions through which phenotypes obtain other necessary nutrients for survival, mating, and care for offspring. Behavioral reward functions have evolved to help individuals to survive and propagate their genes. Apparently, people need to live well and long enough to reproduce. Most would agree that homo-sapiens do so by ingesting the substances that make their bodies function properly. For this reason, foods and drinks are rewards. Additional rewards, including those used for economic exchanges, ensure sufficient palatable food and drink supply. Mating and gene propagation is supported by powerful sexual attraction. Additional properties, like body form, augment the chance to mate and nourish and defend offspring and are therefore also rewards. Care for offspring until they can reproduce themselves helps gene propagation and is rewarding; otherwise, many believe mating is useless. According to David E Comings, as any small edge will ultimately result in evolutionary advantage [21], additional reward mechanisms like novelty seeking and exploration widen the spectrum of available rewards and thus enhance the chance for survival, reproduction, and ultimate gene propagation. These functions may help us to obtain the benefits of distant rewards that are determined by our own interests and not immediately available in the environment. Thus the distal reward function in gene propagation and evolutionary fitness defines the proximal reward functions that we see in everyday behavior. That is why foods, drinks, mates, and offspring are rewarding. There have been theories linking pleasure as a required component of health benefits salutogenesis, (salugenesis). In essence, under these terms, pleasure is described as a state or feeling of happiness and satisfaction resulting from an experience that one enjoys. Regarding pleasure, it is a double-edged sword, on the one hand, it promotes positive feelings (like mindfulness) and even better cognition, possibly through the release of dopamine [22]. But on the other hand, pleasure simultaneously encourages addiction and other negative behaviors, i.e., motivational toxicity. It is a complex neurobiological phenomenon, relying on reward circuitry or limbic activity. It is important to realize that through the “Brain Reward Cascade” (BRC) endorphin and endogenous morphinergic mechanisms may play a role [23]. While natural rewards are essential for survival and appetitive motivation leading to beneficial biological behaviors like eating, sex, and reproduction, crucial social interactions seem to further facilitate the positive effects exerted by pleasurable experiences. Indeed, experimentation with addictive drugs is capable of directly acting on reward pathways and causing deterioration of these systems promoting hypodopaminergia [24]. Most would agree that pleasurable activities can stimulate personal growth and may help to induce healthy behavioral changes, including stress management [25]. The work of Esch and Stefano [26] concerning the link between compassion and love implicate the brain reward system, and pleasure induction suggests that social contact in general, i.e., love, attachment, and compassion, can be highly effective in stress reduction, survival, and overall health. Understanding the role of neurotransmission and pleasurable states both positive and negative have been adequately studied over many decades [26–37], but comparative anatomical and neurobiological function between animals and homo sapiens appear to be required and seem to be in an infancy stage. Finding happiness is different between apes and humans As stated earlier in this expert opinion one key to happiness involves a network of good friends [38]. However, it is not entirely clear exactly how the higher forms of satisfaction and pleasure are related to a sugar rush, winning a sports event or even sky diving, all of which augment dopamine release at the reward brain site. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure. Remarkably, there are pathways for ordinary liking and pleasure, which are limited in scope as described above in this commentary. However, there are **many brain regions**, often termed hot and cold spots, that significantly **modulate** (increase or decrease) our **pleasure or** even **produce the opposite** of pleasure— that is disgust and fear [39]. One specific region of the nucleus accumbens is organized like a computer keyboard, with particular stimulus triggers in rows— producing an increase and decrease of pleasure and disgust. Moreover, the cortex has unique roles in the cognitive evaluation of our feelings of pleasure [40]. Importantly, the interplay of these multiple triggers and the higher brain centers in the prefrontal cortex are very intricate and are just being uncovered. Desire and reward centers It is surprising that many different sources of pleasure activate the same circuits between the mesocorticolimbic regions (Figure 1). Reward and desire are two aspects pleasure induction and have a very widespread, large circuit. Some part of this circuit distinguishes between desire and dread. The so-called pleasure circuitry called “REWARD” involves a well-known dopamine pathway in the mesolimbic system that can influence both pleasure and motivation. In simplest terms, the well-established mesolimbic system is a dopamine circuit for reward. It starts in the ventral tegmental area (VTA) of the midbrain and travels to the nucleus accumbens (Figure 2). It is the cornerstone target to all addictions. The VTA is encompassed with neurons using glutamate, GABA, and dopamine. The nucleus accumbens (NAc) is located within the ventral striatum and is divided into two sub-regions—the motor and limbic regions associated with its core and shell, respectively. The NAc has spiny neurons that receive dopamine from the VTA and glutamate (a dopamine driver) from the hippocampus, amygdala and medial prefrontal cortex. Subsequently, the NAc projects GABA signals to an area termed the ventral pallidum (VP). The region is a relay station in the limbic loop of the basal ganglia, critical for motivation, behavior, emotions and the “Feel Good” response. This defined system of the brain is involved in all addictions –substance, and non –substance related. In 1995, our laboratory coined the term “Reward Deficiency Syndrome” (RDS) to describe genetic and epigenetic induced hypodopaminergia in the “Brain Reward Cascade” that contribute to addiction and compulsive behaviors [3,6,41]. Furthermore, ordinary “liking” of something, or pure pleasure, is represented by small regions mainly in the limbic system (old reptilian part of the brain). These may be part of larger neural circuits. In Latin, hedus is the term for “sweet”; and in Greek, hodone is the term for “pleasure.” Thus, the word Hedonic is now referring to various subcomponents of pleasure: some associated with purely sensory and others with more complex emotions involving morals, aesthetics, and social interactions. The capacity to have pleasure is part of being healthy and may even extend life, especially if linked to optimism as a dopaminergic response [42]. Psychiatric illness often includes symptoms of an abnormal inability to experience pleasure, referred to as anhedonia. A negative feeling state is called dysphoria, which can consist of many emotions such as pain, depression, anxiety, fear, and disgust. Previously many scientists used animal research to uncover the complex mechanisms of pleasure, liking, motivation and even emotions like panic and fear, as discussed above [43]. However, as a significant amount of related research about the specific brain regions of pleasure/reward circuitry has been derived from invasive studies of animals, these cannot be directly compared with subjective states experienced by humans. In an attempt to resolve the controversy regarding the causal contributions of mesolimbic dopamine systems to reward, we have previously evaluated the three-main competing explanatory categories: “liking,” “learning,” and “wanting” [3]. That is, dopamine may mediate (a) liking: the hedonic impact of reward, (b) learning: learned predictions about rewarding effects, or (c) wanting: the pursuit of rewards by attributing incentive salience to reward-related stimuli [44]. We have evaluated these hypotheses, especially as they relate to the RDS, and we find that the incentive salience or “wanting” hypothesis of dopaminergic functioning is supported by a majority of the scientific evidence. Various neuroimaging studies have shown that anticipated behaviors such as sex and gaming, delicious foods and drugs of abuse all affect brain regions associated with reward networks, and may not be unidirectional. Drugs of abuse enhance dopamine signaling which sensitizes mesolimbic brain mechanisms that apparently evolved explicitly to attribute incentive salience to various rewards [45]. Addictive substances are voluntarily self-administered, and they enhance (directly or indirectly) dopaminergic synaptic function in the NAc. This activation of the brain reward networks (producing the ecstatic “high” that users seek). Although these circuits were initially thought to encode a set point of hedonic tone, it is now being considered to be far more complicated in function, also encoding attention, reward expectancy, disconfirmation of reward expectancy, and incentive motivation [46]. The argument about addiction as a disease may be confused with a predisposition to substance and nonsubstance rewards relative to the extreme effect of drugs of abuse on brain neurochemistry. The former sets up an individual to be at high risk through both genetic polymorphisms in reward genes as well as harmful epigenetic insult. Some Psychologists, even with all the data, still infer that addiction is not a disease [47]. Elevated stress levels, together with polymorphisms (genetic variations) of various dopaminergic genes and the genes related to other neurotransmitters (and their genetic variants), and may have an additive effect on vulnerability to various addictions [48]. In this regard, Vanyukov, et al. [48] suggested based on review that whereas the gateway hypothesis does not specify mechanistic connections between “stages,” and does not extend to the risks for addictions the concept of common liability to addictions may be more parsimonious. The latter theory is grounded in genetic theory and supported by data identifying common sources of variation in the risk for specific addictions (e.g., RDS). This commonality has identifiable neurobiological substrate and plausible evolutionary explanations. Over many years the controversy of dopamine involvement in especially “pleasure” has led to confusion concerning separating motivation from actual pleasure (wanting versus liking) [49]. We take the position that animal studies cannot provide real clinical information as described by self-reports in humans. As mentioned earlier and in the abstract, on November 23rd, 2017, evidence for our concerns was discovered [50] In essence, although nonhuman primate brains are similar to our own, the disparity between other primates and those of human cognitive abilities tells us that surface similarity is not the whole story. Sousa et al. [50] small case found various differentially expressed genes, to associate with pleasure related systems. Furthermore, the dopaminergic interneurons located in the human neocortex were absent from the neocortex of nonhuman African apes. Such differences in neuronal transcriptional programs may underlie a variety of neurodevelopmental disorders. In simpler terms, the system controls the production of dopamine, a chemical messenger that plays a significant role in pleasure and rewards. The senior author, Dr. Nenad Sestan from Yale, stated: “Humans have evolved a dopamine system that is different than the one in chimpanzees.” This may explain why the behavior of humans is so unique from that of non-human primates, even though our brains are so surprisingly similar, Sestan said: “It might also shed light on why people are vulnerable to mental disorders such as autism (possibly even addiction).” Remarkably, this research finding emerged from an extensive, multicenter collaboration to compare the brains across several species. These researchers examined 247 specimens of neural tissue from six humans, five chimpanzees, and five macaque monkeys. Moreover, these investigators analyzed which genes were turned on or off in 16 regions of the brain. While the differences among species were subtle, **there was** a **remarkable contrast in** the **neocortices**, specifically in an area of the brain that is much more developed in humans than in chimpanzees. In fact, these researchers found that a gene called tyrosine hydroxylase (TH) for the enzyme, responsible for the production of dopamine, was expressed in the neocortex of humans, but not chimpanzees. As discussed earlier, dopamine is best known for its essential role within the brain’s reward system; the very system that responds to everything from sex, to gambling, to food, and to addictive drugs. However, dopamine also assists in regulating emotional responses, memory, and movement. Notably, abnormal dopamine levels have been linked to disorders including Parkinson’s, schizophrenia and spectrum disorders such as autism and addiction or RDS. Nora Volkow, the director of NIDA, pointed out that one alluring possibility is that the neurotransmitter dopamine plays a substantial role in humans’ ability to pursue various rewards that are perhaps months or even years away in the future. This same idea has been suggested by Dr. Robert Sapolsky, a professor of biology and neurology at Stanford University. Dr. Sapolsky cited evidence that dopamine levels rise dramatically in humans when we anticipate potential rewards that are uncertain and even far off in our futures, such as retirement or even the possible alterlife. This may explain what often motivates people to work for things that have no apparent short-term benefit [51]. In similar work, Volkow and Bale [52] proposed a model in which dopamine can favor NOW processes through phasic signaling in reward circuits or LATER processes through tonic signaling in control circuits. Specifically, they suggest that through its modulation of the orbitofrontal cortex, which processes salience attribution, dopamine also enables shilting from NOW to LATER, while its modulation of the insula, which processes interoceptive information, influences the probability of selecting NOW versus LATER actions based on an individual’s physiological state. This hypothesis further supports the concept that disruptions along these circuits contribute to diverse pathologies, including obesity and addiction or RDS.

Outweighs on magnitude- loss of future generations

Death is bad-kills subject itself, takes away ability for future improvement

### **Underview**

**Underview**

**[1] 1AR theory is legit – anything else means infinite abuse – drop the debater, competing interps, no rvis and the highest layer of the round – 1AR is too short to make up for the time trade-off – no RVIs or 2NR theory and paradigm issues– 6 min 2NR means they can brute force me every time.**

**[2] Assume I-meets to spec shells since bidirectional shells and infinite regress prove abuse is inescapable**

**[3] Give me new 2AR weighing and arguments - I only know what arguments I have to weigh against in the 2NR, but they know in the 1AR.**

**4] Aff RVIs- A] I have a 4 minute 1AR to answer T or Theory which skews my time from other arguments. T bites out of a higher percentage of my rebuttal time. B] No risk issue for the negative, you can go for it in the 2nr if I undercover but if I over allocate you can just kick it.**

**5] No new 2nr theory or paradigm arguments- incentivize them to dump on theory ion the 2nr and win every time cuz of the skew**