# NEG – AI – Neg vs. AI Aff – Case Debate

## 1NC Frontlines

### NATO Advantage

#### **1. Their ev fearmongers**

Valeriano and Maness 15 – co-authors of Cyber War versus Cyber Realities, AND \*Senior Lecturer in Social and Political Sciences at the University of Glasgow, AND \*\*Visiting Fellow of Security and Resilience Studies at Northeastern University (Brandon and Ryan C., The Coming Cyberpeace: The Normative Argument Against Cyberwarfare, Foreign Affairs, https://www.foreignaffairs.com/articles/2015-05-13/coming-cyberpeace)

The era of cyberconflict is upon us; at least, experts seem to accept that cyberattacks are the new normal. In fact, however, evidence suggests that cyberconflict is not as prevalent as many believe. Likewise, the severity of individual cyber events is not increasing, even if the frequency of overall attacks has risen. And an emerging norm against the use of severe state-based cybertactics contradicts fear-mongering news reports about a coming cyberapocalypse. The few isolated incidents of successful state-based cyberattacks do not a trend make. Rather, what we are seeing is cyberespionage and probes, not cyberwarfare. Meanwhile, the international consensus has stabilized around a number of limited acceptable uses of cybertechnology—one that prohibits any dangerous use of force. Despite fears of a boom in cyberwarfare, there have been no major or dangerous hacks between countries. The closest any states have come to such events occurred when Russia attacked Georgian news outlets and websites in 2008; when Russian forces shut down banking, government, and news websites in Estonia in 2007; when Iran attacked the Saudi Arabian oil firm Saudi Aramco with the Shamoon virus in 2012; and when the United States attempted to sabotage Iran’s nuclear power systems from 2007 to 2011 through the Stuxnet worm. The attack on Sony from North Korea is just the latest overhyped cyberattack to date, as the corporate giant has recovered its lost revenues from the attack and its networks are arguably more resilient as a result. Even these are more probes into vulnerabilities than full attacks. Russia’s aggressions show that Moscow is willing to use cyberwarfare for disruption and propaganda, but not to inflict injuries or lasting infrastructural damage. The Shamoon incident allowed Iran to punish Saudi Arabia for its alliance with the United States as Tehran faced increased sanctions; the attack destroyed files on Saudi Aramco’s computer network but failed to do any lasting damage. The Stuxnet incident also failed to create any lasting damage, as Tehran put more centrifuges online to compensate for virus-based losses and strengthened holes in their system. Further, these supposedly successful cases of cyberattacks are balanced by many more examples of unsuccessful ones. If the future of cyberconflict looks like today, the international community must reassess the severity of the threat. Cyberattacks have demonstrated themselves to be more smoke than fire. This is not to suggest that incidents are on the decline, however. Distributed denial-of-service attacks and infiltrations increase by the minute—every major organization is probed constantly, but only for weaknesses or new infiltration methods for potential use in the future. Probes and pokes do not destabilize states or change trends within international politics. Even common cyber actions have little effect on levels of cooperation and conflict between states.

#### 2. Squo solves – DIANA is already producing AI necessary for NATO to compete with Russia and China – that’s their 1AC Parrikar evidence.

#### 3. Actors self-deter --- cyber is unique because defenders have the absolute defense of disconnecting. If attacks get strong enough, the internet itself becomes a bad deal for the defender, which also screws the attacker by denying lower-level cyber coercion and espionage

Jon **Lindsay and** Erik **Gartzke 14**, Jon R. Lindsay is an assistant research scientist at the University of California Institute on Global Conflict and Cooperation and an assistant adjunct professor at the University of California, San Diego School of International Relations and Pacific Studies, AND Erik Gartzke is Professor and Director of cPASS at the Department of Political Science @ UCSD, Lindsay, Jon R., and Erik Gartzke. “Coercion through Cyberspace: The Stability-Instability Paradox Revisited.” The Power to Hurt: Coercion in the Modern World, Oct. 2014.

Perhaps the simplest form of cross domain response to cyber threats is to forgo the use of the cyber domain altogether. While it is hard if not impossible to limit exposure to nuclear weapons and even a determined conventional assault, the risk of cyber attack can be completely eliminated by disconnection from digital networks. The internet is an artificial environment and connection to it is voluntary. Individuals, organizations, and states retain the ability to unplug completely, limit their online transactions, or erect various barriers to connection. Obviously disconnection is not very feasible commercially, socially, and militarily today, but this is more of an indicator of how positive the benefits of interconnection are compared to the perceived risks. If the risks were perceived as extreme, then firms and states could go back to making a living as they did before 1991 (when WWW went public). This is a cross-domain threat because it entails exiting the cyber domain altogether to leverage more traditional economic and military transactions. The threat of disconnection follows from the more general logic of international organizations, where contracts must be self-enforcing.44 On the internet as in institutions, ties among egoistic actors under anarchy must be mutually beneficial. If the internet is a bad deal for actors, they can throw up boundaries or exit cyberspace altogether. If repeated exposure to adversarial exploitation causes states to lose more than they gain from being online, then they can undermine the attacker’s very means for accessing the victim. The threat of voluntary disconnection is especially relevant for repeated interactions, or repeated exploitation, rather than a one-shot “bolt from the blue” cyber attack (which is better countered with cross-domain retaliation). The threat of disconnection is implicit in the voluntary nature of connection to the internet, and the potential loss of the ability to make future attacks exercises a deterrent effect on attacks in the present. An aggressor who does not want to lose the cyber adjuncts for espionage and disruption it has invested so much in developing will show restraint in their employment. This does not mean that coercion cannot take place online, but it is bounded by excess value. One implication is that the countries that can be most coerced on the internet will be those that have the most to lose by leaving it.

#### 4. Alt causes to miscalculation – war in Ukraine and Biden’s posture shift over Taiwan have already heightened US-Russia-China tensions.

#### 5. There are diminishing returns on cyber escalation because stronger attacks are more likely to provoke disconnection.

Jon **Lindsay and** Erik **Gartzke 14**, Jon R. Lindsay is an assistant research scientist at the University of California Institute on Global Conflict and Cooperation and an assistant adjunct professor at the University of California, San Diego School of International Relations and Pacific Studies, AND Erik Gartzke is Professor and Director of cPASS at the Department of Political Science @ UCSD, Lindsay, Jon R., and Erik Gartzke. “Coercion through Cyberspace: The Stability-Instability Paradox Revisited.” The Power to Hurt: Coercion in the Modern World, Oct. 2014.

The combination of cross domain deterrence and voluntary connection to the internet gives rise to a variant of the classic stability-instability paradox. In Glenn Snyder’s original articulation of the paradox, mutually assured destruction could deter nuclear war. However, MAD was not credible for, and might even encourage, limited conventional war.56 Or as Robert Jervis puts it, “To the extent that the military balance is stable at the level of all-out nuclear war, it will become less stable at lower levels of violence.”57 Cyber capacity is a poor substitute for nuclear weapons, myths of paralysis notwithstanding, yet there is a similar logic constraining the distributions of harms which are possible via information technology. To extend this logic to the cyber domain, there are a variety of deterrent mechanisms contain the most disruptive types of cyber attacks yet fail to contain, and even enable, a wide variety of online espionage, subversion, symbolic protest, and criminal predation. In cyberspace we observe a rather stable damage contest (i.e., no “paralysis” and limited “disruption”) but a very unstable intelligence-counterintelligence contest (lots of “espionage” and “fraud” vying with efforts at “control” and “mobilization”). Thus the actors that have the ability to carry out highly destructive cyber attacks (mainly state actors for now) lack the motivation to attack; by contrast, these same actors as well as many different actors have both the ability and motivation to inflict irritant aggression with little fear of suffering consequences By and large, cyber options fill out the lower end of the conflict spectrum where deterrence is not as credible or reliable. The very few cases of physically disruptive cyber attack we do observe—mainly powerful states conducting covert action or battlefield support operations against militarily weaker opponents—have notably involved stronger actors who not only have the capacity to plan and conduct a sophisticated attack but also have the ability to deter retaliation against their use of cyber attack. This cyber variant of the stability-instability paradox has a slightly different logic, however. In the nuclear realm, actors cannot disconnect from the threatened harm, and this is what makes the threatened destruction both mutual and assured. When there are many missiles with many warheads, the chance of intercepting them on the ground through a disarming counterforce strike or in the air through ballistic missile defense with any confidence becomes vanishingly small. Not so in cyberspace, where connection to the internet or acceptance of connections through it is voluntary. There is “no forced entry in cyberspace” in Libicki’s phrase, and so the hundredth cyber attack against a closed vulnerability is as ineffective as the first. Attackers thus rely on deception to exploit vulnerabilities and ensure that they stay open. However, offensive deception can fail in the “fog of cyberwar” and defenders can be deceptive as well, both of which are more likely against high-reward targets (where cross domain deterrence also more credible). The need to preserve internet connections to facilitate ongoing and future deception as well as the need to preserve stealth to avoid the consequences of getting caught imposes discipline on attackers. Actors cannot enjoy the substantial benefits of interconnection without accepting some risk of exploitation (hacking to spy) and attack (hacking to disrupt). Thus the successful “lockout” of the internet, with advantage accruing exclusively to one political group or another, is not realistic. Moreover, because these harms share similar techniques, the observed abundance 39 of the former represents a latent potential for the later. The latent escalatory potential of even minor irritants leads to rampant fears of unrestrained catastrophe, to be sure. Yet this latent potential is difficult to harness for targeted coercion because the threat is self-effacing. Declared cyber threats that highlight the vulnerability to be exploited are readily mitigated. Instead, the ineradicable threat of cyber catastrophe (ineradicable as long as the internet continues to be useful) creates a general if diffuse deterrent effect among all parties who value their connection to the internet. No one who wants to make money on the internet really wants to have a cyberwar, and this includes states as well as criminals. Which types of actors are most able to benefit through internet coercion and which are most vulnerable to coercion? Large powers like the U.S. are highly dependent on the internet but also highly skilled at inflicting harm, both through cyber and traditional military force. Poor powers across the digital divide may have little vulnerability at all, while medium powers may have vulnerability but lack a range of forces to deter attacks. This might imply a “curvature” to the utility of cyber coercion. Big-capable countries are vulnerable to cyber harm but can deter through other military instruments. Poor states are not vulnerable. It may be the prosperous small or digitally developing who are in trouble, since they cannot credibly deter and have high dependence on the internet. The information revolution is often thought to be a boon to non-state actors, and indeed it is, but mainly in the irritant class of cyber operations. Moreover, the increasing ubiquity and sophistication of information technologies can be expected to have something of a democratizing effect on intelligence and counterintelligence techniques whereby firms and citizens will have access to and be concerned about the types of things that were historically the purview of obscure state intelligence agencies. However, it would be a mistake to use the increasing ferment of low-intensity information contests to infer the shape of higher 40 intensity activity. On the contrary, the traditional logic of war will continue to dominate the expression of cyber aggression. Because threatened internet harms depend on voluntary connections in the first place, and as many actors have alternative means to inflict (cross domain) harm in retaliation, the coercive utility of cyberspace is actually somewhat limited. At the same time an ever increasing variety irritants and more temperamental adjuncts becomes available for global political interaction. The “net” result is that opponents have strong incentives to impose costs via the internet but also to keep those costs low enough to preserve interconnection and avoid retaliation. Therefore, contests in damage will remain relatively stable while contests in intelligence will be increasingly unstable. The human-built world is becoming more complex, to be sure, but it is not necessarily more dangerous. As long as it is desirable to connect to the internet tomorrow, there will be only limited harm via the internet today.

### Democracy Advantage

#### 1. Regulations are bad –

#### A.) Regulation destroys AI control by driving it underground, abroad, or into higher-risk areas

Dr. Nell Watson 21, PhD in Engineering from the University of Gloucestershire, Degree in AGI Safety Fundamentals from the University of Cambridge, Senior Scientific Advisor to The Future Society at Harvard University, Fellow at the British Computing Society and Royal Statistical Society, “Regulatory Challenges to Catastrophic AI Risk”, ExO Insight, 11/24/2021, https://insight.openexo.com/regulatory-challenges-to-ai/

Rick Increase Factors:

Obfuscation: Regulations may drive research underground where it is harder to monitor, or to ‘flag of convenience’ jurisdictions with lax restrictions, by embedding dangerous technologies within apparently benign cover operations (multipurpose technologies), or by obfuscating the externalized effects of a system, such as in the vehicle emissions scandal (Wikipedia).

Arms race: Recent advances in machine learning such as multimodal abstractions models (aka Transformers, Large Language Models, Foundation Models) such as GPT-3 and DALL-E illustrate that dumping computing resources (and the funds for them) in colossal models seems to be a worthy investment. So far, there is no apparent limit or diminishing return on model size, and so now state and non-state actors are scrambling to produce the largest models feasible in order to access thousands of new capabilities never before possible. An arms race is afoot. Such arms races can lead to rapid and unexpected take-off in terms of AI capability, and the rush can blindside people to risks, especially when the loss of a race can mean an existential threat to a nation or organization.

Perverse incentives: Incentives can be powerful forces within organizations, and financialization, moral panic, or fear of political danger may cause irrational or incorrigible behavior of personnel within organizations.

Postmodern Warfare: Inexpensive Drones and other AI-enabled technologies have tremendous disruptive promise within the realm of warfare, especially given their asynchronous nature. Control of drone swarms must be performed using AI technologies, and this may encourage the entire theatre of war to be increasingly delegating to AI, perhaps including the interpretation of rules of engagement and grand strategy. (Lsusr, 2021)

Cyber Warfare: Hacking of systems is increasingly being augmented with machine intelligence (Cisomag, 2021), through GAN-enabled password crackers (Griffin, 2019) and advanced social engineering tools (Newman, 2021). This is equally the case in the realm of defense, where only machine intelligence may provide the swift execution required to defend systems from attack. A lack of international cyberwar regulations, and poor international policing of organized cybercrimes, may increase the risk of catastrophic risks to societal systems.

Zersetzung: The human mind is becoming a new theatre of war, through personalized generative propaganda, which may even extend to gaslighting attacks on targeted individuals, significantly leading to destabilization of societies (Williams, 2021). Such technologies are also plausibly deniable, being difficult to prove who may be responsible.

Inflexibility: The German Military after WW1 was not allowed to develop their artillery materiel, and so developed powerful rocket technologies instead, as these were not subject to regulation. Similarly, inflexible rules may permit exploitable loopholes. They may also not be sufficiently adaptive to allow for the implementation of new technologies and even improved industry standards.

Limitation of problem spaces: – It may be taboo to allow machine intelligence to work on sensitive issues or to be exposed to controversial (if potentially accurate) datasets. This may limit the ability of AI to make sense of out complex issues, and thereby frustrate finding solutions for crises.

#### B.) That causes catastrophic AI since it’ll be controlled by rogues with no precautions AND without defensive countermeasures

Robert A. Freitas 22 Jr., JD from the University of Santa Clara (Santa Clara, CA), School of Law, Research Fellow at the Institute for Molecular Manufacturing, Won the 2009 Feynman Prize in Nanotechnology for Theory, BS in Physics and Psychology from Harvey Mudd College, “Molecular Manufacturing: Too Dangerous to Allow?”, Nanotechnology Perceptions, Volume 2, Number 1, Republished at The Lifeboat Foundation, https://lifeboat.com/ex/molecular.manufacturing

Attempts to block or “relinquish” [3, 12] molecular manufacturing research will make the world a more, not less, dangerous place [13]. This paradoxical conclusion is founded on two premises. First, attempts to block the research will fail. Second, such attempts will preferentially block or slow the development of defensive measures by responsible groups. One of the clear conclusions reached by Freitas [4] was that effective countermeasures against self-replicating systems should be feasible, but will require significant effort to develop and deploy. (Nanotechnology critic Bill Joy, responding to this author, complained in late 2000 that any nanoshield defense to protect against global ecophagy “appears to be so outlandishly dangerous that I can’t imagine we would attempt to deploy it.” [12]) But blocking the development of defensive systems would simply insure that offensive systems, once deployed, would achieve their intended objective in the absence of effective countermeasures. James Hughes [13] concurs: “The only safe and feasible approach to the dangers of emerging technology is to build the social and scientific infrastructure to monitor, regulate and respond to their threats.”

We can reasonably conclude that blocking the development of defensive systems would be an extraordinarily bad idea. Actively encouraging rapid development of defensive systems by responsible groups while simultaneously slowing or hindering development and deployment by less responsible groups (“nations of concern”) would seem to be a more attractive strategy, and is supported by the Foresight Guidelines [10]. As even nanotechnology critic Bill Joy [14] finally admitted in late 2003: “These technologies won’t stop themselves, so we need to do whatever we can to give the good guys a head start.”

While a 100% effective ban against development might theoretically be effective at avoiding the potential adverse consequences, blocking all groups for all time does not appear to be a feasible goal. The attempt would strip us of defenses against attack, increasing rather than decreasing the risks. In addition, blocking development would insure that the substantial economic, environmental, and medical benefits [15] of this new technology would not be available.

Observes Glenn Reynolds [16]:

To the extent that such efforts [to ban all development] succeed, the cure may be worse than the disease. In 1875, Great Britain, then the world’s sole superpower, was sufficiently concerned about the dangers of the new technology of high explosives that it passed an act barring all private experimentation in explosives and rocketry. The result was that German missiles bombarded London rather than the other way around. Similarly, efforts to control nanotechnology, biotechnology or artificial intelligence are more likely to drive research underground (often under covert government sponsorship, regardless of international agreement) than they are to prevent research entirely. The research would be conducted by unaccountable scientists, often in rogue regimes, and often under inadequate safety precautions. Meanwhile, legitimate research that might cure disease or solve important environmental problems would suffer.

#### 2. No internal link – no reason a democratic model for AI development solves democracy more broadly – other countries will just use old-fashioned authoritarianism.

#### 3. Democratic peace is statistically disproven---it’s conflict driving

Dr. Daina Chiba 21, Associate Professor of Political Science in the Department of Government and Public Administration at the University of Macau, Ph.D. in Political Science from Rice University, LL.M in Jurisprudence and International Relations from Hitotsubashi University, and Dr. Erik Gartzke, Professor of Political Science at the University of California, San Diego, PhD in Political Science from the University of Iowa, “Make Two Democracies and Call Me in the Morning: Endogenous Regime Type and the Democratic Peace”, 2/19/2021, https://dainachiba.github.io/research/make2dem/Make2Dem.pdf

The democratic peace—the observation that democracies are less likely to fight each other than are other pairings of states—is one of the most widely acknowledged empirical regularities in international relations. Prominent scholars have even characterized the relationship as an empirical law (Levy 1988; Gleditsch 1992). The discovery of a special peace in liberal dyads stimulated enormous scholarly debate and led to, or reinforced, a number of policy initiatives by various governments and international organizations. Although a broad consensus has emerged among researchers regarding the empirical correlation between joint democracy and peace, disagreement remains as to its logical foundations. Numerous theories have been proposed to account for how democracy produces peace, if only dyadically (e.g., Russett 1993; Rummel 1996; Doyle 1997; Schultz 2001).

At the same time, peace appears likely to foster or maintain democracy (Thompson 1996; James, Solberg, andWolfson 1999). A vast swath of research in political science and economics proposes explanations for the origins of liberal government involving variables such as economic development (Lipset 1959; Burkhart and Lewis-Beck 1994; Przeworski et al. 2000; Acemoglu and Robinson 2006; Epstein et al. 2006) and inequality (Boix 2003), political interests (Downs 1957; Bueno de Mesquita et al. 2003), power hierarchies (Moore 1966; Lake 2009), third party inducements (Pevehouse 2005) or impositions (Peceny 1995; Meernik 1996), geography (Gleditsch 2002b), and natural resource endowments (Ross 2001), to list just a few examples. Each of these putative causes of democracy is also associated with various explanations for international conflict. Indeed, some as yet poorly defined set of canonical factors may contribute both to democracy and to peace, making it look as if the two variables are directly related, even if possibly they are not.

We seek to contribute to this literature, not by proposing yet another theory to explain how democracy vanquishes war, but by estimating the causal effect of joint democracy on the probability of militarized disputes using a quasi-experimental research design. We begin by noting that some of the common causes of democracy and peace may be unobservable, generating an endogenous relationship between the two. Theories of democracy and explanations for peace are at a formative state; it is not possible to utilize detailed, validated and widely accepted models of each of these processes to assess their interaction. Indeed, to a remarkable degree democracy and peace each remain poorly understood and weakly accounted for empirically, despite their central roles in international politics. We address the risk of spurious correlation by applying an instrumental variables approach. Having taken into account possible endogeneity between democracy and peace, we find that joint democracy does not have an independent pacifying effect on interstate conflict. Instead, our findings show that democratic countries are more likely to attack other democracies than are non-democracies. Our results call into question the large body of theory that has been proposed to account for the apparent pacifism of democratic dyads.

#### 4. No internal link – no reason the authoritarian AI their Imbrie evidence describes leads to the broader rollback of democracy their Cremer and Kemp evidence is about.

### Solvency

#### 1. EU says no – 4 reasons – distrust of the US, desires for digital autonomy, lack of threat perception, and Brexit all short-circuit transatlantic cooperation

Franke 2021 – policy fellow at European Council on Foreign Relations

Ulrike Esther Franke January 2021 “Artificial Divide: How Europe And America Could Clash Over Ai” European Council on Foreign Relations

Obstacles to cooperation

Both sides of the Atlantic are already motivated to cooperate with each other on AI. But, despite these shared interests, transatlantic cooperation on AI may not be straightforward. Four trends, in particular, could pose problems: transatlantic estrangement; European digital autonomy efforts; differing views on China; and, potentially, Brexit.

Transatlantic estrangement

The transatlantic alliance has had a bad four years. The Trump administration’s criticism of the United Nations and the World Trade Organization, the president’s threats to leave NATO, and his active criticism of the EU all made Europeans wonder whether they had lost their most important partner. Moreover, in light of the conflict over 5G, in the minds of many Europeans, technology in particular has become an area that creates conflict in the transatlantic relationship rather than fostering cooperation.

Although transatlantic relations are likely to improve under Biden, substantial damage has been done, and it will take some time to mend these ties. But, even if relations improve, it is becoming increasingly obvious that US has a diminishing interest in Europe as a geopolitically important part of the world. This trend was already visible under Trump’s predecessor, Barack Obama. It is, therefore, unsurprising that, on technology cooperation, both sides emphasise the importance of working with other actors as well as each other. The US National Security Commission on AI, for example, recommends that the US Departments of State and Defense “should negotiate formal AI cooperation agreements with Australia, India, Japan, New Zealand, South Korea, and Vietnam”. Its March 2020 report emphasises on several occasions the importance of the Five Eyes intelligence alliance. Meanwhile, Europeans are pursuing the idea of an alliance for multilateralism. And, on technology and AI more specifically, they have also begun to reach out to other democratic allies.

European digital autonomy

The most important aspect of transatlantic estrangement, however, is not the loss of trust between the US and Europe – which they will eventually reverse. Rather, during the four years of the Trump administration, and partly in response to isolationist tendencies in the US, Europeans have become much more comfortable talking about European strategic autonomy or sovereignty. Without encouraging the narrative that these efforts are directed against the US, or were primarily an answer to Trump, Europeans aim to empower Europe as an actor in its own right. In the technological realm, this led to the idea of European digital sovereignty, the aim of which is to build up European technological capabilities. Although European digital sovereignty is not specifically targeted at the US, it has led, among other things, to efforts such as the possible regulation of American technology companies and concerns over American firms acquiring European start-ups. European campaigners and some policymakers believe US tech giants such as Google, Apple, Facebook, and Amazon are forces to protect against. European thinking on technology partly developed in opposition to the US and US companies. Thus, European efforts to build up digital sovereignty may impede transatlantic cooperation.

The EU’s effort to strengthen ethical AI, and to make ‘trustworthy AI’ a unique selling point for Europe, might also end up creating problems for transatlantic cooperation. Many EU policymakers believe that the EU’s insistence on ethical AI will eventually become a location advantage for Europe (much like data privacy): as more people become concerned about unethical AI and data security, they will prefer to use or buy AI ‘made in Europe’ rather than elsewhere. In this respect, two European aims are at odds with each other: on the one hand, Europeans want to ensure that AI is developed and used in an ethical way. Partnering with a powerful player such as the US on this matter should be an obvious way to help them achieve this goal. However, if the EU considers ethical AI not just a goal for humanity but a development that may also create commercial advantages for Europe, then transatlantic cooperation on this issue is counterproductive, as it would undermine Europe’s uniqueness.

Finally, many Europeans have expressed scepticism about the extent to which Europe and the US are indeed aligned on ethical AI principles. For example, the Danish national AI strategy argues for a common ethical and human-centred basis for AI. It describes ethical AI as a particularly European approach: “Europe and Denmark should not copy the US or China. Both countries are investing heavily in artificial intelligence, but with little regard for responsibility, ethical principles and privacy.” Many Europeans feel that the US “has no idea how to regulate” cyberspace and continues to show little enthusiasm for doing so. The EU, however, likes to think of itself as a trailblazer when it comes to digital rights, such as the 2014 “right to be forgotten” or the 2018 General Data Protection Regulation.

Differing views on China

As noted, only a few European states look at AI through a geopolitical lens, and EU efforts on this matter focus primarily on strengthening the EU as a global player. This means that the American interest in using transatlantic cooperation as a means to curb Chinese power is likely to have only limited traction in Europe. And US companies, rather than Chinese ones, currently remain the primary ‘other’ for Europe to measure itself against. European regulation efforts still concentrate on US companies rather than Chinese firms. In light of recent changes in language on China in both NATO and the EU, which describe the country as a “strategic competitor” and “systemic rival”, European and American views of China may converge eventually. But, at the moment, Europeans do not feel the same urgency as the US when it comes to pushing back against China. Unfortunately for those in the US who favour greater transatlantic cooperation, the European nation that most often thinks in geopolitical terms, France, is among those most sceptical of the US.

Brexit

Finally, the United Kingdom’s exit from the EU may further complicate transatlantic cooperation on AI. Even if the EU and the UK were to decide to work as closely as possible, the EU would no longer be able to speak as much of Europe as previously. Any transatlantic cooperation on AI will, therefore, require coordination between three, rather than two, actors. Given the UK’s strong technology and AI credentials (AI leader DeepMind is based in London, although it is now owned by Google’s parent company, Alphabet), the country is likely to want to play an important role in any future negotiations on AI standards and use.

#### 2. Squo solves – DIANA accelerators already solve the public-private partnerships of the aff – that’s 1AC Parrikar.

#### 3. EU tech protectionism creates a chilling effect on the industry – prevents research and development by dissuading start-up participation

Broadbent 2021 - senior adviser (non-resident) with the Scholl Chair in International Business at the Center for Strategic and International Studies in Washington, D.C.

Meredith Broadbent August 10, 2020 “Internet or Splinternet? The Consequences of European Tech Sovereignty” Center for Strategic and International Studies https://www.csis.org/analysis/internet-or-splinternet-consequences-european-tech-sovereignty

Sitting atop resounding commercial success in the domestic as well as the global marketplace, the CEOs of four U.S. digital behemoths appeared last week before the House of Representatives to respond to public and congressional concerns about market domination.¶ The size and success of these champions, under fire for lack of transparency and anticompetitive practices, have triggered similar, more exaggerated concerns in Europe, which are playing out in a frenzy of proposed rulemaking at both the Commission and member-state level. As Congress probes the market behavior of U.S. digital companies, it is important for U.S. legislators to consider parallel rising pressure for digital and industrial protectionism in Europe, particularly in Germany and France. This flurry of regulatory activity endangers transatlantic data transfers—the lifeblood of many innovative U.S. firms—and will hurt U.S. business success globally while simultaneously distracting both Europe and the United States from the broader threat posed by China’s authoritarian state capitalist system.¶ Many Europeans are deeply worried about the continent’s ability to compete long term in the global digital economy, given its challenges in developing competitors to the U.S. and Chinese tech giants. Yet European economies have tremendous strengths—highly educated workforces, depth in engineering, advanced technologies, and a leadership role in a host of industries that are rapidly digitizing, such as agriculture, infrastructure, transportation, logistics, manufacturing, and knowledge-intensive services, for example, financial, business, environmental, and engineering services. Constructing new European regulations for the digital era should be guided first by the do no harm warning.¶ The United States and Europe share an interest in piloting, investing in, and leveraging disruptive technologies like artificial intelligence (AI), blockchain, and the Internet of Things in these key industries, and liberalizing market access for services in emerging markets. The United States and Europe can also work together to ensure firms and workers in more underserved and remote regions are able to apply technologies, access educational and training opportunities, and increase productivity. But improved transatlantic cooperation in supporting innovation, productivity, consumer welfare, and sustainable job creation in a flourishing transatlantic digital economy, under an open and free internet architecture, seems all the more remote in light of where European regulators say they are headed.¶ The Commission released a series of documents earlier this year outlining Europe’s regulatory future, including a White Paper on Artificial Intelligence, a Communication on European Strategy for Data, and a framing paper related to Shaping Europe’s Digital Future. These documents and many more speak to the European desire to achieve “digital autonomy” and “tech sovereignty” through an array of regulatory and tax changes aimed at nurturing indigenous tech firms, developing independent European data pools, and tamping down on large, innovative foreign firms offering attractive digital services to European consumers.¶ Artificial Intelligence¶ Following the General Data Protection Regulation (GDPR) model of being the first mover with comprehensive regulation, the Commission is taking aggressive aim at being the preeminent “global standards setter” in AI. The European Union’s heavy-handed preliminary proposal for AI regulation diverges sharply from the U.S. approach. In its white paper on AI, the Commission has proposed ex ante conformity assessments to control access to the EU market for AI applications originating outside of the EU. That would likely require a new framework with criteria, benchmarks, and standards that European authorities will use to determine if an AI product is “trustworthy, secure and in respect of European values and rules” before it is allowed entry into the European market. This approach could include a pre-market review by EU authorities of algorithms, training data, documentation on programming, and how the system was built, as well as accuracy tests and other requirements. ¶ Also under consideration are data quality and traceability requirements that would require non-EU firms to train AI applications on GDPR compliant data, an extraterritorial regulation that seemingly would burden U.S. firms with requirements to completely retrain many proprietary algorithms developed in the United States with new data sets as a condition of market access in the European Union.¶ Unlike its inaction in the area of federal privacy regulation, which has allowed Europe to set a de facto global standard, the United States has led an international, cooperative effort through the G7 to reach common standards in the challenging area of AI research and development. A coordinated interagency team in the United States focused on AI regulation and emerging issues makes transatlantic collaboration is this new regulatory space a possibility.¶ New Activist Competition Measures¶ In a February 4, 2020, letter to Commission Executive Vice-President Vestager calling for more activist competition policy, France, Germany, Poland, and Italy describe their two overarching goals: (1) moderating competition emanating from “state-backed and subsidized” foreign competitors (e.g., China); and (2) controlling “emergence of large players in the digital economy relying on the accumulation of data and unparalleled network effects resulting in . . . excessive market power.” (e.g., large U.S. and Chinese tech companies.) The four European governments advocate for policies to tackle the “digital platforms with paramount importance for competition,” saying that these firms should be subject to “specific scrutiny” in Europe and an enhanced regulatory framework.¶ In different EU jurisdictions, competition authorities are increasingly weaving the precautionary principle into regulation of technology markets with the idea that new ex ante rules should be imposed ahead of any actual anticompetitive behavioral violation. Legislation pending in the German Bundestag is in this vein. For its part, the French government has put forward a legislative proposal to regulate “systemic platforms.” Under the French plan, competition regulators would be authorized to surveil and block planned acquisitions of European tech startups of almost any size.

#### 4. No solvency – lack of optimization makes AI military application ineffective

Konaev and Chahal 2021 – research fellow and research analys with the Center for Security and Emerging Technology

Margarita Konaev Husanjot Chahal April 2021 “The Path of Least Resistance: Multinational Collaboration on AI for Military Logistics and Sustainment” CSET Issue Brief

This is not to say that adopting and developing, let alone collaborating on AI-enabled logistics will be an easy task for the U.S. military and allied defense organizations. The ML and deep learning algorithms behind commercial AI-enabled logistics are generally not optimized for military needs.39 And if the experience of the Department of Defense is any indication, there are multiple challenges with regards to the data needed to power AI applications—from lack of data to problems with traceability, access, and interoperability of data collected by different systems.40 Moreover, data security and privacy concerns as well as different legal frameworks for how personal data is collected, handled, processed, and stored remain a critical barrier to international collaboration. Lack of clarity surrounding how to implement the exemptions for research incorporated into the General Data Protection Regulation, for example, has stalled collaboration between the U.S. National Institutes of Health and some European counterparts.41

#### 5. Data sharing is too hard---integration is impossible

Erik Lin-Greenberg 20, postdoctoral fellow at the University of Pennsylvania’s Perry World House. Texas National Security Review, Vol 3, Iss 2. Spring. "Allies and Artificial Intelligence: Obstacles to Operations and Decision-Making" <https://tnsr.org/2020/03/allies-and-artificial-intelligence-obstacles-to-operations-and-decision-making/> //pipk

Data Sharing and Standardization

As the number of states that employ military AI applications grows, the ability of allies to operate collectively will depend, in part, on the sharing of data that fuels AI systems. AI requires massive amounts of data to train and feed algorithms and models. To identify a surface-to-air missile site, for instance, an AI image classifier must learn to differentiate missile sites from other facilities by studying images of known missile sites. The more data used to train these systems, the more accurate the system will be.66 Once fielded, AI-enabled systems like the image classifier must continue to be fed imagery from reconnaissance aircraft, satellites, or other assets in a format that allows for target identification. Shared data might be needed to enhance the accuracy of AI-enabled systems or to increase the effectiveness of multinational operations. For example, some member states may be better positioned than others to gather data on a shared rival, increasing the amount of data available to AI systems.67

Because of its central role in AI development and operations, the U.S. military has described data as a “strategic asset,” yet sharing data — even within the U.S. military — has posed a significant challenge.68 Lt. Gen. Jack Shanahan, founding director of the Department of Defense’s Joint Artificial Intelligence Center, lamented that data “has stymied most of the [military] services when they dive into AI.” Specifically, “they realize how hard it is to get the right data to the right place, get it cleaned up, and train algorithms on it.”69 There are two primary factors that underlie these challenges. First, data resides in thousands of different repositories and often lacks standardized formatting. Video from the U.S. military’s fleet of reconnaissance aircraft, for instance, is stored on multiple separate networks and in different data formats. Second, significant amounts of data collected by weapons and sensor systems are considered proprietary by the contractors that design and maintain the equipment. Firms must first release or “unlock” this data before it can be analyzed or fed into other systems.70

Although shared data is needed to develop AI technologies that can integrate with allied equipment, states face both political and technical barriers to sharing security sector information. From a political standpoint, even the closest allies may be hesitant to share the sensitive data that undergirds military AI systems. States fear that sharing sensitive data might reveal intelligence sources and methods, the revelation of which could compromise ongoing operations or strain political relationships. During the Vietnam War, for example, the United States was hesitant to share intelligence with its ally South Vietnam. Officials feared that communist sympathizers in the ranks of South Vietnam’s military and intelligence services would pass information to North Vietnam and the Vietcong. They were also concerned that intelligence might highlight that the United States was planning operations that did not align with South Vietnam’s government priorities.71 States also worry that shared information could be used for purposes other than initially intended or in ways that are at odds with the sharing state’s interests. Turkey, for instance, may have used intelligence shared as part of counter-Islamic State operations to instead target Kurdish forces in northern Syria.72

To minimize these perceived risks, states often impose restrictions on information sharing. One of the most common control measures is sharing only finished intelligence — products such as briefings or reports derived from a variety of different intelligence sources.73 These products provide assessments, but generally omit technical data — like details about the information source — that could reveal intelligence-gathering procedures and methods. Although data sharing is a type of intelligence sharing, developing and operating AI-enabled systems may require the exchange of more complete raw data in far larger quantities than traditional intelligence sharing. Raw data, which includes imagery files and signals intercepts, can include metadata such as spectral signatures of imagery or characteristics of electronic emissions that can be used to feed AI systems.74 Since this information can expose precise capabilities and shortcomings of a state’s intelligence systems, decision-makers may be hesitant to share it — especially in the large quantities needed to develop and run many AI-enabled systems.

There are also technical obstacles to data sharing. Just as the U.S. intelligence community and military stores information in nonstandardized formats on multiple systems, so too do national security institutions in other allied states. Across an alliance, the same type of data might reside on hundreds of different networks and in different formats, making it difficult to share data or to develop interoperable systems. To use data from other alliance partners, data must first be located, transferred out of a state’s classified computer network, and reformatted into a standardized, usable form. Given that the U.S. military has faced significant data management challenges in its own AI development, we should expect alliances — with their greater number of institutional actors and data sources — to encounter even greater obstacles to data sharing.

Vulnerabilities: AI and Data

In addition to barriers to sharing, allies face the possibility that the data that they do share may be especially vulnerable to adversary manipulation. Engineers and military leaders worry that rivals could hack into data repositories and “poison” data — inserting fake data or making existing data deliberately flawed.75 In one recent academic study, researchers used data poisoning to cause an algorithm designed to identify street signs to misclassify stop signs as speed limit signs.76 In the military domain, a rival could poison imagery data in order to throw off AI target recognition systems, leading the system to miss military targets, classify them as nonmilitary ones, or identify civilian infrastructure as military facilities. At best, this could require manpower-intensive efforts to secure and sanitize data or lead states to turn back to manual analysis of targets. At worst, this could lead to the inadvertent targeting of noncombatants.

While the risk of data poisoning plagues all AI users, alliance military operations may be particularly susceptible because data inputs from multiple states are used to train and operate AI-enabled systems across the alliance. Flawed data inputs from one state can therefore have cascading effects across an alliance’s operations. Rivals will recognize that different members of an alliance defend their networks and data with different levels of safeguards. As a result, rivals may target data stored by states where they have easier access.77

## NATO Advantage

### Conventional Deterrence Turn – 1NC

#### European security cooperation is stable, but has shifted to the EDI to deter Russia---plan trades off, undermines conventional deterrence

Michael J. Mazarr et al 22, senior political scientist at the RAND Corporation. "Security Cooperation in a Strategic Competition" Research Report. <http://www.rand.org/t/RRA650-1> //pipk

Security Cooperation Efforts in Europe Emphasize Reassuring U.S. Allies European partners have consistently received approximately 26 percent of all U.S. security aid, but there has been a shift since 2014 in the type of aid these partners have received. Specifically, more attention has been devoted to developing conventional capabilities to deter Russian aggression. Eastern European states that border Russia, particularly Ukraine, received $1.1 billion from 2014 to 2019.18 Georgia, Latvia, Lithuania, and Estonia also received some funding through the European Deterrence Initiative. However, of the billions of dollars designated for the initiative, only a small portion supports building partner capacity. The initiative was designed primarily to support U.S. force presence, infrastructure, and exercises; as a result, DoD does not formally categorize European Deterrence Initiative funding as security aid.19

Over our period of study, U.S. military sales have increased for both highly capable allies and newer North Atlantic Treaty Organization (NATO) partners in Europe. Among the top weapon purchasers, the United Kingdom, Italy, and Germany are purchasing advanced aircraft, unmanned aerial systems, and missiles through the FMS and DCS programs. Poland and Romania are acquiring Patriot air-defense systems, and Slovakia is purchasing F-16 aircraft through FMS.20

The focus of U.S. education and training efforts in Europe has also been on conventional military capabilities funded by FMS. Germany, the Netherlands, Italy, Romania, and Poland are the top recipients of these security cooperation activities.21

Furthermore, U.S.- and NATO-sponsored exercises in Europe are increasing in number and size. These exercises, which focus on improving interoperability for conventional operations, include Saber Guardian (a U.S.-sponsored exercise with 25,000 service members from 22 allied and partner nations) and Trident Juncture (a NATO-sponsored exercise with 50,000 participants from NATO and partner countries).22 NATO arrangements afford the United States a high degree of access in Europe. Of the 51 countries in the EUCOM AOR, 45 have multilateral SOFAs through NATO or the Partnership for Peace program, and there are 126 acquisition and cross-servicing agreements that apply to the region.23 The majority of USAF armament agreements and airmen in personnel exchanges are with European countries, and most personnel exchanges through the USAF’s Military Personnel Exchange Program are with the United Kingdom. Countries in EUCOM’s AOR received $27 million in Overseas Humanitarian, Disaster, and Civic Aid support, divided across several Eastern European states; Ukraine received $4 million, the highest amount.

### Heg Bad – 1NC

#### Multipolarity is inevitable – Trump provided a strategic opening for retrenchment and soft-landing – the affs cling to hegemony ensures violent transition wars and failure of global cooperation.

Marchetti ‘17 (Raffaele Marchetti, \*senior assistant professor in International Relations at the Department of Political Science and the School of Government of LUISS, external expert for the European Commission, “End of the American hegemonic cycle,” Feb 14, https://www.opendemocracy.net/raffaele-marchetti/end-of-american-hegemonic-cycle)//cmr

Trump’s election marks the end of the long phase of American world hegemony. Despite the electoral slogan “Make America Great Again” and the great expectations this may have generated, his presidency will presumably be characterized by an overall retrenchment. Many different interpretations have been provided on the reasons of Trump’s success ranging from populist framing to FBI support. Contrary to the mainstream debate, I see a more fundamental reason underpinning his victory: the changed costs/benefits balance in the US role in the world. The theory of hegemonic stability holds that at some point the hegemon will start to decline due to the increased costs of the management of the system which outbalance the benefits the hegemon gains out of it. The costs of the management of the system have in fact been accumulating in the last 4 presidencies. During the Bush administrations, security costs due to the military operations in Afghanistan and Iraq have, among other damage, impacted negatively on the US government. Equally, during the Obama presidencies costs due to economic stimuli have increased the overall debt of the country. As predicted by hegemonic theory, we finally come to a point in which the costs became too heavy for the citizens, or rather their perception of this becomes more evident, so that they start to protest and demand a change. This was intercepted by Trump much more than by Clinton, with Trump stepping back to decrease the costs of international projection. So-called “imperial overstretch”, formed much earlier, led Trump’s electorate to seek less international costs (and possibly, but less likely, more domestic benefits). Hence, the promised withdrawal from a number of Free Trade Agreements, the discussion of the terms of NATO participation, cancellation of the environmental deals etc. From this perspective Trump’s election has to do with a much longer trend of international order rather than the specific time-lapse of the electoral campaign, a trend of dis-engagement that had already begun during the Obama administration and will now be more clearly visible with Trump. The system in which we have been living in the last 70 years was created in large part by the US leadership. The UN system, Bretton Woods Institutions, NATO, and WTO are all institutional arrangements that have been strongly promoted by the post WWII hegemon and that have been preserved in life thanks to continuous support by the USA. Now all of this is put into question by the resistance of the newly elected president to engage in and with these multilateral organizations. Trump will most likely have a more unpredictable, possibly turbulent behaviour vis a vis all of these institutions and this will lead to their transformation and perhaps for some, to their marginalization. Other significant elements in this jigsaw puzzle have to do with the phenomenon of globalization. It is because of global transformation in production chains, the relocation of multinational corporation abroad coupled with the possibility of (re-)importing goods, and the subsequent loss of jobs that a component of the middle class has been badly affected by unemployment. But it is also thanks to globalization that China is rising fast and challenging the US leadership in economic, but also increasingly in political and military terms. It is clear by now that the policy choice for globalization taken by the US leadership in the ‘80s (republican) and ‘90s (democratic) was beneficial only at the beginning, but later turned out to be detrimental to the power position of the USA in the world economy. It is widely recognised that India and especially China are the real winners in the game of globalization, hence closing the gap with the west. Russia is an additional element in this calculation. This new would-be multipolar system, deprived of the overall western master plan, is left to pure bargaining, pure transactionalism played with ad hoc games, which is very much in line with Trump’s overall attitude to socio-economic engagement. And yet, this might have a de-polarizing effect, a de-escalating consequence in terms of the current world tensions that have grown in the last few years. Here I am thinking especially of the west-Russia split. Without a hegemonic power pushing for a specific world order, a more balanced system might emerge. We might end up with a Trump presidency that has polarizing effects domestically and depolarizing effects internationally. The line of march is clear: either new competition based on multipolar rivalry which might possibly escalate into conflicts, or the opening of new channels for dialogue, might lead to a foundational phase in which innovative rules of the international games are written by western and non-western powers together. It will be up to Trump and the other leaders to steer the way and to take a decision on which way to go.

#### Hegemony fuels global prolif – withdrawal solves.

Mearsheimer and Walt ‘16 (John J, R. Wendell Harrison Distinguished Service Professor of Political Science at the University of Chicago, and Stephen M, Robert and Renée Belfer Professor of International Affairs at the Harvard Kennedy School, “The Case for Offshore Balancing: A Superior U.S. Grand Strategy,” Foreign Affairs, July/August, https://www.foreignaffairs.com/articles/united-states/2016-06-13/case-offshore-balancing)//cmr

Proponents of liberal hegemony also claim that the United States must remain committed all over the world to prevent nuclear proliferation. If it reduces its role in key regions or withdraws entirely, the argument runs, countries accustomed to U.S. protection will have no choice but to protect themselves by obtaining nuclear weapons. No grand strategy is likely to prove wholly successful at preventing proliferation, but offshore balancing would do a better job than liberal hegemony. After all, that strategy failed to stop India and Pakistan from ramping up their nuclear capabilities, North Korea from becoming the newest member of the nuclear club, and Iran from making major progress with its nuclear program. Countries usually seek the bomb because they fear being attacked, and U.S. efforts at regime change only heighten such concerns. By eschewing regime change and reducing the United States' military footprint, offshore balancing would give potential proliferators less reason to go nuclear. Moreover, military action cannot prevent a determined country from eventually obtaining nuclear weapons; it can only buy time. The recent deal with Iran serves as a reminder that coordinated multilateral pressure and tough economic sanctions are a better way to discourage proliferation than preventive war or regime change.

#### Prolif causes extinction.

Kroenig ’16 (Matthew; June 2016; Associate Professor in the Department of Government and School of Foreign Service at Georgetown University, Senior Fellow in the Brent Scowcroft Center on International Security at The Atlantic Council; National Bureau of Asian Research, No. 58 “Approaching Critical Mass: Asia's Multipolar Nuclear Future,”)

The most important reason to be concerned about nuclear weapons in Asia, of course, is the threat that nuclear weapons might be used. To be sure, the use of nuclear weapons remains remote, but **the probability is not zero** and the consequences could be **catastrophic**. The subject, therefore, deserves careful scrutiny. Nuclear use would overturn a **70-year tradition of nonuse**, could result in **large-scale death** and **destruction**, and might **set a precedent** that shapes how nuclear weapons are viewed, proliferated, and postured decades hence. The dangers of escalation may be **magnified** in a **multipolar nuclear order** in which small skirmishes present the potential to **quickly draw in multiple powers**, each with a finger on the nuclear trigger. The following discussion will explore the logic of crisis escalation and strategic stability in a multipolar nuclear order.14 First and foremost, the existence of multipolar nuclear powers means that crises may **pit multiple nuclear-armed states against one another**. This may be the result of formal planning if a state’s strategy calls for fighting multiple nuclear-armed adversaries simultaneously. A state may choose such a strategy if it believes that a war with one of these states would inevitably mean war with both. Alternatively, in a war between state A and state B, state A may decide to conduct a preventive strike on state C for fear that it would otherwise seek to exploit the aftermath of the war between states A and B. Given U.S. nuclear strategy in the early Cold War, for example, it is likely that a nuclear war between the United States and the Soviet Union would have also resulted in U.S. nuclear attacks against China, even if China had not been a direct participant in the precipitating dispute. In addition, conflicts of interest between nuclear powers may **inadvertently impinge** on the interests of other nuclear-armed states, **drawing them into conflict**. There is always a danger that one nuclear power could take action against a nuclear rival and that this action would **unintentionally cross a red line** for a third nuclear power, triggering a tripartite nuclear crisis. Linton Brooks and Mira Rapp-Hooper have dubbed this category of phenomena the “security trilemma.”15 For example, if the United States were to engage in a show of force in an effort to signal resolve to Russia, such as the flushing of nuclear submarines, this action could inadvertently trigger a crisis for China. There is also the issue of **“catalytic” war**. This may be the first mechanism by which Cold War strategists feared that multiple nuclear players could increase the motivations for a nuclear exchange. They worried that a third nuclear power, such as China, might conduct a nuclear strike on one of the superpowers, leading the wounded superpower to conclude wrongly that the other superpower was responsible and thereby retaliate against an innocent state presumed to be the aggressor. This outcome was seen as potentially attractive to the third state as a way of destroying the superpowers and promoting itself within the global power hierarchy. Fortunately, this scenario never came to pass during the Cold War. With modern intelligence, reconnaissance, and early warning capabilities among the major powers, it is more difficult to imagine such a scenario today, although this risk is **still conceivable** among less technologically developed states. In addition to acting directly against one another, nuclear powers could be **drawn into smaller conflicts** between their allies and **brought face to face in peak crises**. International relations theorists discuss the concept of **“chain ganging”** within alliance relationships, the dangers of which are **more severe** when the possibility of nuclear escalation is present.16 Although this was a potential problem even in a bipolar nuclear order, the more nuclear weapons states present, the **greater the likelihood** of multiple nuclear powers entering a crisis. A similar logic suggests that the more fingers on the nuclear trigger, the **more likely it is** that nuclear weapons **will be used**. Multipolar nuclear crises are **not without historical precedent**.17 Several Cold War crises featured the Soviet Union against the United States and its European nuclear-armed allies, Britain and later France. The 1973 Arab-Israeli War involved the United States, the Soviet Union, and a nuclear-armed Israel. The United States has been an interested party in regional nuclear disputes, including the Sino-Soviet border war of 1969 and several crises in the past two decades on the Indian subcontinent. Indeed, many of these crises stand out as among **the most dangerous of the nuclear era**.

#### Heg causes nuclear miscalc with Russia.

Zuckerman ‘16 (June 7, 2016, at 4:21 p.m., Mortimer Zuckerman is the chairman and editor-in-chief of U.S. News & World Report and the publisher of the New York Daily News, Cites William Perry – former sec of Defense under Clinton, https://www.usnews.com/opinion/articles/2016-06-07/four-paths-to-nuclear-disaster)//AP

The third current nuclear threat, the danger of nuclear war **through miscalculation**, most seriously with the Russians, is, Perry warns, complex but quite credible. The story begins at the end of the Cold War when prospects seemed promising for a crucial cooperative atmosphere with the Russians, perhaps eventually a pan-European security system. Indeed, because of the considerable diplomatic effort led by Perry, the Russians had joined their military forces with NATO's operating in Bosnia, a remarkable and hopeful development. But the present situation is marked by Russia's continuing **aggressive statements** about their ongoing dependence on nuclear weapons, their robust program to modernize those forces (which seems to mirror U.S. modernization programs) and their aggression in Ukraine and elsewhere in their neighborhood. It has been an especially bitter development for Perry, for it started after the Cold War ended. So what happened? After the Cold War ended, and under Perry's leadership, the Partnership for Peace was formed as an interim organization which Eastern European nations, including Russia, could join as a step to eventual NATO membership, the key idea being that the transition would be gradual. Understandably, there was little patience among the outside nations in waiting to join. Perry emphasized that traditional Russian sensibilities and concerns about its regional security mandated a carefully **staged**, gradual **expansion** of the security organization. He was opposed by Richard Holbrooke, then an assistant secretary in the State Department, who argued to promptly move to the Eastern European "partnership" members into NATO. After all, what could the Russians do? Perry asked Clinton to hold a decisive National Security Council meeting where he could make the case for delay. There Vice President Al Gore argued for immediate inclusion and Perry lost the day. Clinton agreed to membership at once for Poland, Hungary and the Czech Republic, delaying for a while the membership of the Baltic States. Perry nearly resigned, but decided not to do so in the hopes he could help mitigate the increasing lack of trust by the Russians who claimed NATO had no concern for their priorities. But it was not possible; NATO expansion turned out to be the first slip down a slick slope leading to the hostile relations we have today. Russia today genuinely feels threatened and concerned regarding what it believes is **U.S. pursuit of military superiority** and political and **economic hegemony.** It views our actions as inconsistent with traditional notions of strategic stability. Thus Russia presently is an unlikely partner in the process of nuclear disarmament. Perry makes the case that it is in U.S. and Russian interest to change our present momentum toward a new Cold War and he emphasizes that this process requires listening carefully to the concerns of others. Failing that, the germinating threat is evident today: Look, for example, to Russia's action in the Ukraine and the Baltics, where President Vladimir Putin has pursued an **aggressive policy** based on the stated belief that his country bears a **responsibility to protect** ethnic Russians in those countries. This policy has already led to warfare in the Ukraine; if it were applied to any of the Baltic nations, all of which have a substantial number of ethnic Russians, it could lead to a military conflict between Russian and NATO troops. Clearly the greatest danger is an escalation to the **use of nuclear weapons**, either by foolish design or miscalculation. The expressions by the Russian government of its dependence on nuclear weapons make this danger all the more pressing. Neither the Russian nor NATO leadership would want this outcome of course; but the escalation could occur **beyond their control**, especially with the Russian emphasis on "**tactical" nuclear weapons** whose management might be in the hands of battlefield military commanders, as it was during the Cuban Missile Crisis.

### ! D – 2NC

#### **Their ev fearmongers**

Valeriano and Maness 15 – co-authors of Cyber War versus Cyber Realities, AND \*Senior Lecturer in Social and Political Sciences at the University of Glasgow, AND \*\*Visiting Fellow of Security and Resilience Studies at Northeastern University (Brandon and Ryan C., The Coming Cyberpeace: The Normative Argument Against Cyberwarfare, Foreign Affairs, https://www.foreignaffairs.com/articles/2015-05-13/coming-cyberpeace)

The era of cyberconflict is upon us; at least, experts seem to accept that cyberattacks are the new normal. In fact, however, evidence suggests that cyberconflict is not as prevalent as many believe. Likewise, the severity of individual cyber events is not increasing, even if the frequency of overall attacks has risen. And an emerging norm against the use of severe state-based cybertactics contradicts fear-mongering news reports about a coming cyberapocalypse. The few isolated incidents of successful state-based cyberattacks do not a trend make. Rather, what we are seeing is cyberespionage and probes, not cyberwarfare. Meanwhile, the international consensus has stabilized around a number of limited acceptable uses of cybertechnology—one that prohibits any dangerous use of force. Despite fears of a boom in cyberwarfare, there have been no major or dangerous hacks between countries. The closest any states have come to such events occurred when Russia attacked Georgian news outlets and websites in 2008; when Russian forces shut down banking, government, and news websites in Estonia in 2007; when Iran attacked the Saudi Arabian oil firm Saudi Aramco with the Shamoon virus in 2012; and when the United States attempted to sabotage Iran’s nuclear power systems from 2007 to 2011 through the Stuxnet worm. The attack on Sony from North Korea is just the latest overhyped cyberattack to date, as the corporate giant has recovered its lost revenues from the attack and its networks are arguably more resilient as a result. Even these are more probes into vulnerabilities than full attacks. Russia’s aggressions show that Moscow is willing to use cyberwarfare for disruption and propaganda, but not to inflict injuries or lasting infrastructural damage. The Shamoon incident allowed Iran to punish Saudi Arabia for its alliance with the United States as Tehran faced increased sanctions; the attack destroyed files on Saudi Aramco’s computer network but failed to do any lasting damage. The Stuxnet incident also failed to create any lasting damage, as Tehran put more centrifuges online to compensate for virus-based losses and strengthened holes in their system. Further, these supposedly successful cases of cyberattacks are balanced by many more examples of unsuccessful ones. If the future of cyberconflict looks like today, the international community must reassess the severity of the threat. Cyberattacks have demonstrated themselves to be more smoke than fire. This is not to suggest that incidents are on the decline, however. Distributed denial-of-service attacks and infiltrations increase by the minute—every major organization is probed constantly, but only for weaknesses or new infiltration methods for potential use in the future. Probes and pokes do not destabilize states or change trends within international politics. Even common cyber actions have little effect on levels of cooperation and conflict between states.

#### Actors self-deter --- cyber is unique because defenders have the absolute defense of disconnecting. If attacks get strong enough, the internet itself becomes a bad deal for the defender, which also screws the attacker by denying lower-level cyber coercion and espionage

Jon **Lindsay and** Erik **Gartzke 14**, Jon R. Lindsay is an assistant research scientist at the University of California Institute on Global Conflict and Cooperation and an assistant adjunct professor at the University of California, San Diego School of International Relations and Pacific Studies, AND Erik Gartzke is Professor and Director of cPASS at the Department of Political Science @ UCSD, Lindsay, Jon R., and Erik Gartzke. “Coercion through Cyberspace: The Stability-Instability Paradox Revisited.” The Power to Hurt: Coercion in the Modern World, Oct. 2014.

Perhaps the simplest form of cross domain response to cyber threats is to forgo the use of the cyber domain altogether. While it is hard if not impossible to limit exposure to nuclear weapons and even a determined conventional assault, the risk of cyber attack can be completely eliminated by disconnection from digital networks. The internet is an artificial environment and connection to it is voluntary. Individuals, organizations, and states retain the ability to unplug completely, limit their online transactions, or erect various barriers to connection. Obviously disconnection is not very feasible commercially, socially, and militarily today, but this is more of an indicator of how positive the benefits of interconnection are compared to the perceived risks. If the risks were perceived as extreme, then firms and states could go back to making a living as they did before 1991 (when WWW went public). This is a cross-domain threat because it entails exiting the cyber domain altogether to leverage more traditional economic and military transactions. The threat of disconnection follows from the more general logic of international organizations, where contracts must be self-enforcing.44 On the internet as in institutions, ties among egoistic actors under anarchy must be mutually beneficial. If the internet is a bad deal for actors, they can throw up boundaries or exit cyberspace altogether. If repeated exposure to adversarial exploitation causes states to lose more than they gain from being online, then they can undermine the attacker’s very means for accessing the victim. The threat of voluntary disconnection is especially relevant for repeated interactions, or repeated exploitation, rather than a one-shot “bolt from the blue” cyber attack (which is better countered with cross-domain retaliation). The threat of disconnection is implicit in the voluntary nature of connection to the internet, and the potential loss of the ability to make future attacks exercises a deterrent effect on attacks in the present. An aggressor who does not want to lose the cyber adjuncts for espionage and disruption it has invested so much in developing will show restraint in their employment. This does not mean that coercion cannot take place online, but it is bounded by excess value. One implication is that the countries that can be most coerced on the internet will be those that have the most to lose by leaving it.

#### There are diminishing returns on cyber escalation because stronger attacks are more likely to provoke disconnection.

Jon **Lindsay and** Erik **Gartzke 14**, Jon R. Lindsay is an assistant research scientist at the University of California Institute on Global Conflict and Cooperation and an assistant adjunct professor at the University of California, San Diego School of International Relations and Pacific Studies, AND Erik Gartzke is Professor and Director of cPASS at the Department of Political Science @ UCSD, Lindsay, Jon R., and Erik Gartzke. “Coercion through Cyberspace: The Stability-Instability Paradox Revisited.” The Power to Hurt: Coercion in the Modern World, Oct. 2014.

The combination of cross domain deterrence and voluntary connection to the internet gives rise to a variant of the classic stability-instability paradox. In Glenn Snyder’s original articulation of the paradox, mutually assured destruction could deter nuclear war. However, MAD was not credible for, and might even encourage, limited conventional war.56 Or as Robert Jervis puts it, “To the extent that the military balance is stable at the level of all-out nuclear war, it will become less stable at lower levels of violence.”57 Cyber capacity is a poor substitute for nuclear weapons, myths of paralysis notwithstanding, yet there is a similar logic constraining the distributions of harms which are possible via information technology. To extend this logic to the cyber domain, there are a variety of deterrent mechanisms contain the most disruptive types of cyber attacks yet fail to contain, and even enable, a wide variety of online espionage, subversion, symbolic protest, and criminal predation. In cyberspace we observe a rather stable damage contest (i.e., no “paralysis” and limited “disruption”) but a very unstable intelligence-counterintelligence contest (lots of “espionage” and “fraud” vying with efforts at “control” and “mobilization”). Thus the actors that have the ability to carry out highly destructive cyber attacks (mainly state actors for now) lack the motivation to attack; by contrast, these same actors as well as many different actors have both the ability and motivation to inflict irritant aggression with little fear of suffering consequences By and large, cyber options fill out the lower end of the conflict spectrum where deterrence is not as credible or reliable. The very few cases of physically disruptive cyber attack we do observe—mainly powerful states conducting covert action or battlefield support operations against militarily weaker opponents—have notably involved stronger actors who not only have the capacity to plan and conduct a sophisticated attack but also have the ability to deter retaliation against their use of cyber attack. This cyber variant of the stability-instability paradox has a slightly different logic, however. In the nuclear realm, actors cannot disconnect from the threatened harm, and this is what makes the threatened destruction both mutual and assured. When there are many missiles with many warheads, the chance of intercepting them on the ground through a disarming counterforce strike or in the air through ballistic missile defense with any confidence becomes vanishingly small. Not so in cyberspace, where connection to the internet or acceptance of connections through it is voluntary. There is “no forced entry in cyberspace” in Libicki’s phrase, and so the hundredth cyber attack against a closed vulnerability is as ineffective as the first. Attackers thus rely on deception to exploit vulnerabilities and ensure that they stay open. However, offensive deception can fail in the “fog of cyberwar” and defenders can be deceptive as well, both of which are more likely against high-reward targets (where cross domain deterrence also more credible). The need to preserve internet connections to facilitate ongoing and future deception as well as the need to preserve stealth to avoid the consequences of getting caught imposes discipline on attackers. Actors cannot enjoy the substantial benefits of interconnection without accepting some risk of exploitation (hacking to spy) and attack (hacking to disrupt). Thus the successful “lockout” of the internet, with advantage accruing exclusively to one political group or another, is not realistic. Moreover, because these harms share similar techniques, the observed abundance 39 of the former represents a latent potential for the later. The latent escalatory potential of even minor irritants leads to rampant fears of unrestrained catastrophe, to be sure. Yet this latent potential is difficult to harness for targeted coercion because the threat is self-effacing. Declared cyber threats that highlight the vulnerability to be exploited are readily mitigated. Instead, the ineradicable threat of cyber catastrophe (ineradicable as long as the internet continues to be useful) creates a general if diffuse deterrent effect among all parties who value their connection to the internet. No one who wants to make money on the internet really wants to have a cyberwar, and this includes states as well as criminals. Which types of actors are most able to benefit through internet coercion and which are most vulnerable to coercion? Large powers like the U.S. are highly dependent on the internet but also highly skilled at inflicting harm, both through cyber and traditional military force. Poor powers across the digital divide may have little vulnerability at all, while medium powers may have vulnerability but lack a range of forces to deter attacks. This might imply a “curvature” to the utility of cyber coercion. Big-capable countries are vulnerable to cyber harm but can deter through other military instruments. Poor states are not vulnerable. It may be the prosperous small or digitally developing who are in trouble, since they cannot credibly deter and have high dependence on the internet. The information revolution is often thought to be a boon to non-state actors, and indeed it is, but mainly in the irritant class of cyber operations. Moreover, the increasing ubiquity and sophistication of information technologies can be expected to have something of a democratizing effect on intelligence and counterintelligence techniques whereby firms and citizens will have access to and be concerned about the types of things that were historically the purview of obscure state intelligence agencies. However, it would be a mistake to use the increasing ferment of low-intensity information contests to infer the shape of higher 40 intensity activity. On the contrary, the traditional logic of war will continue to dominate the expression of cyber aggression. Because threatened internet harms depend on voluntary connections in the first place, and as many actors have alternative means to inflict (cross domain) harm in retaliation, the coercive utility of cyberspace is actually somewhat limited. At the same time an ever increasing variety irritants and more temperamental adjuncts becomes available for global political interaction. The “net” result is that opponents have strong incentives to impose costs via the internet but also to keep those costs low enough to preserve interconnection and avoid retaliation. Therefore, contests in damage will remain relatively stable while contests in intelligence will be increasingly unstable. The human-built world is becoming more complex, to be sure, but it is not necessarily more dangerous. As long as it is desirable to connect to the internet tomorrow, there will be only limited harm via the internet today.

## Cooperation Advantage

### EU Turn – 1NC

#### Plan prevents cooperation with EU---proliferates new agencies and makes coordination impossible

Simona R. Soare 21, was a Senior Associate Analyst at EUISS from 2019 to end May 2021. Her research focused on United States security policy, transatlantic security and EU-NATO relations. Prior to joining EUISS, Simona served as advisor to the Vice-President of the European Parliament (2015-2019) and as an analyst with the Romanian Ministry of Defence, working on transatlantic and European security. She has also been a research associate with the Institut d’Études Européennes (IEE) at Université Saint Louis-Bruxelles. Simona holds a PhD in Political Science from the National School for Political and Administrative Studies in Bucharest where she lectured on international security (2008-2015). She is the recipient of a U.S. Department of State fellowship on U.S. Grand Strategy and has published extensively on American and transatlantic security. "Innovation as Adaptation: NATO and Emerging Technologies" June 11. <https://www.gmfus.org/news/innovation-adaptation-nato-and-emerging-technologies> //pipk

Broadening and Regularizing NATO-EU Cooperation

The Biden administration also provides a window of opportunity to progress and be ambitious in broadening and regularizing NATO-EU cooperation in the field of innovation and EDTs. While political dialogue among their leadership has been steadily increasing over the past five years, the EU and NATO have consulted on their respective EDTs agendas only twice. Furthermore, bureaucratic procedures and misalignments sometimes frustrate even staff-to-staff cooperation in this area. The EU and increasingly NATO are proliferating agencies that conduct work on innovation in EDTs, including in security and defense. This makes it challenging to achieve internal coherence of activities within one organization, let alone coordinating agendas between the two.

As the allies meet with the EU High Representative for Foreign Affairs and Security Policy Josep Borrell at this month’s NATO summit, the two organizations need a more ambition agenda for cooperation. In particular, the EU and NATO need to consider a joint task force on fostering defense innovation and EDTs, with renewable two-year mandates. This instrument would provide political impetus for closer cooperation on EDTs, it would give coherence, regularity, and structure to the efforts of the two sides, and ensure commonality of purpose and synergy of output. In addition, allies could consider meeting regularly in EU-NATO digital summit formats. The EU could take the lead in this regard given its considerable financial capacity for investing in EDTs and its regulatory powers. EU-NATO digital summits would allow the transatlantic partners to regularly review progress, provide strategic guidance on legal, ethical and adoption challenges related to innovation and EDTs, and enhance their tech diplomacy by inviting like-minded global partners to attend.

### AI Governance Bad – 1NC

#### Regulation destroys AI control by driving it underground, abroad, or into higher-risk areas

Dr. Nell Watson 21, PhD in Engineering from the University of Gloucestershire, Degree in AGI Safety Fundamentals from the University of Cambridge, Senior Scientific Advisor to The Future Society at Harvard University, Fellow at the British Computing Society and Royal Statistical Society, “Regulatory Challenges to Catastrophic AI Risk”, ExO Insight, 11/24/2021, https://insight.openexo.com/regulatory-challenges-to-ai/

Rick Increase Factors:

Obfuscation: Regulations may drive research underground where it is harder to monitor, or to ‘flag of convenience’ jurisdictions with lax restrictions, by embedding dangerous technologies within apparently benign cover operations (multipurpose technologies), or by obfuscating the externalized effects of a system, such as in the vehicle emissions scandal (Wikipedia).

Arms race: Recent advances in machine learning such as multimodal abstractions models (aka Transformers, Large Language Models, Foundation Models) such as GPT-3 and DALL-E illustrate that dumping computing resources (and the funds for them) in colossal models seems to be a worthy investment. So far, there is no apparent limit or diminishing return on model size, and so now state and non-state actors are scrambling to produce the largest models feasible in order to access thousands of new capabilities never before possible. An arms race is afoot. Such arms races can lead to rapid and unexpected take-off in terms of AI capability, and the rush can blindside people to risks, especially when the loss of a race can mean an existential threat to a nation or organization.

Perverse incentives: Incentives can be powerful forces within organizations, and financialization, moral panic, or fear of political danger may cause irrational or incorrigible behavior of personnel within organizations.

Postmodern Warfare: Inexpensive Drones and other AI-enabled technologies have tremendous disruptive promise within the realm of warfare, especially given their asynchronous nature. Control of drone swarms must be performed using AI technologies, and this may encourage the entire theatre of war to be increasingly delegating to AI, perhaps including the interpretation of rules of engagement and grand strategy. (Lsusr, 2021)

Cyber Warfare: Hacking of systems is increasingly being augmented with machine intelligence (Cisomag, 2021), through GAN-enabled password crackers (Griffin, 2019) and advanced social engineering tools (Newman, 2021). This is equally the case in the realm of defense, where only machine intelligence may provide the swift execution required to defend systems from attack. A lack of international cyberwar regulations, and poor international policing of organized cybercrimes, may increase the risk of catastrophic risks to societal systems.

Zersetzung: The human mind is becoming a new theatre of war, through personalized generative propaganda, which may even extend to gaslighting attacks on targeted individuals, significantly leading to destabilization of societies (Williams, 2021). Such technologies are also plausibly deniable, being difficult to prove who may be responsible.

Inflexibility: The German Military after WW1 was not allowed to develop their artillery materiel, and so developed powerful rocket technologies instead, as these were not subject to regulation. Similarly, inflexible rules may permit exploitable loopholes. They may also not be sufficiently adaptive to allow for the implementation of new technologies and even improved industry standards.

Limitation of problem spaces: – It may be taboo to allow machine intelligence to work on sensitive issues or to be exposed to controversial (if potentially accurate) datasets. This may limit the ability of AI to make sense of out complex issues, and thereby frustrate finding solutions for crises.

#### That causes catastrophic AI since it’ll be controlled by rogues with no precautions AND without defensive countermeasures

Robert A. Freitas 22 Jr., JD from the University of Santa Clara (Santa Clara, CA), School of Law, Research Fellow at the Institute for Molecular Manufacturing, Won the 2009 Feynman Prize in Nanotechnology for Theory, BS in Physics and Psychology from Harvey Mudd College, “Molecular Manufacturing: Too Dangerous to Allow?”, Nanotechnology Perceptions, Volume 2, Number 1, Republished at The Lifeboat Foundation, https://lifeboat.com/ex/molecular.manufacturing

Attempts to block or “relinquish” [3, 12] molecular manufacturing research will make the world a more, not less, dangerous place [13]. This paradoxical conclusion is founded on two premises. First, attempts to block the research will fail. Second, such attempts will preferentially block or slow the development of defensive measures by responsible groups. One of the clear conclusions reached by Freitas [4] was that effective countermeasures against self-replicating systems should be feasible, but will require significant effort to develop and deploy. (Nanotechnology critic Bill Joy, responding to this author, complained in late 2000 that any nanoshield defense to protect against global ecophagy “appears to be so outlandishly dangerous that I can’t imagine we would attempt to deploy it.” [12]) But blocking the development of defensive systems would simply insure that offensive systems, once deployed, would achieve their intended objective in the absence of effective countermeasures. James Hughes [13] concurs: “The only safe and feasible approach to the dangers of emerging technology is to build the social and scientific infrastructure to monitor, regulate and respond to their threats.”

We can reasonably conclude that blocking the development of defensive systems would be an extraordinarily bad idea. Actively encouraging rapid development of defensive systems by responsible groups while simultaneously slowing or hindering development and deployment by less responsible groups (“nations of concern”) would seem to be a more attractive strategy, and is supported by the Foresight Guidelines [10]. As even nanotechnology critic Bill Joy [14] finally admitted in late 2003: “These technologies won’t stop themselves, so we need to do whatever we can to give the good guys a head start.”

While a 100% effective ban against development might theoretically be effective at avoiding the potential adverse consequences, blocking all groups for all time does not appear to be a feasible goal. The attempt would strip us of defenses against attack, increasing rather than decreasing the risks. In addition, blocking development would insure that the substantial economic, environmental, and medical benefits [15] of this new technology would not be available.

Observes Glenn Reynolds [16]:

To the extent that such efforts [to ban all development] succeed, the cure may be worse than the disease. In 1875, Great Britain, then the world’s sole superpower, was sufficiently concerned about the dangers of the new technology of high explosives that it passed an act barring all private experimentation in explosives and rocketry. The result was that German missiles bombarded London rather than the other way around. Similarly, efforts to control nanotechnology, biotechnology or artificial intelligence are more likely to drive research underground (often under covert government sponsorship, regardless of international agreement) than they are to prevent research entirely. The research would be conducted by unaccountable scientists, often in rogue regimes, and often under inadequate safety precautions. Meanwhile, legitimate research that might cure disease or solve important environmental problems would suffer.

#### AI regulation overshoots, destroying productive applications necessary to prevent existential catastrophes

Gönenç Gürkaynak 18, Founding Partner of ELIG Gürkaynak Attorneys-at-Law, LL.M. from Harvard Law School, İlay Yılmaz, Partner at ELIG Gürkaynak Attorneys-at-Law, and Güneş Haksever, LLM from Istanbul Bilgi University, Attorney at IBM Turkey, “Stifling Artificial Intelligence: Human Perils”, Computer Law & Security Review, Volume 32, Issue 5, 12/12/2018, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3285264

Although scientists have calculated the significant positive welfare effects of Artificial Intelligence (AI), fear mongering continues to hinder AI development. If regulations in this sector stifle our active imagination, we risk wasting the true potential of AIs dynamic efficiencies. Not only would Schumpeter dislike us for spoiling creative destruction, but the AI thinkers of the future would also rightfully see our efforts as the ‘dark age’ of human advancement. This article provides a brief philosophical introduction to artificial intelligence; categorizes artificial intelligence to shed light on what we have and know now and what we might expect from the prospective developments; reflects thoughts of worldwide famous thinkers to broaden our horizons; provides information on the attempts to regulate artificial intelligence from a legal perspective; and discusses how the legal approach needs to be to ensure the balance between artificial intelligence development and human control over them, and to ensure friendly artificial intelligence.

Our technology, our machines, is part of our humanity. We created them to extend ourselves, and that is what is unique about human beings. – Ray Kurzweil1

1. Introduction

The Chinese cardboard game “Go” is one of the most complex strategy games humankind invented. Go was considered so important, there are myths indicating that ancient kings played Go between their armies in the battlefield to resolve the conflict in peace. Computers prevailed against humanities best in many zero-sum, perfect-information, partisan, deterministic strategy games2 before, with the exception of Go, which was something to be proud of.

The strategy aspect of Go is very complex and emphasizes the importance of balance on multiple levels and has internal tensions. A game of Go cannot be won by using brute force: calculating every possible move, similar to what IBM®’s then state of the art AI, Deep Blue® used to win over Gary Kasparov. To manoeuvre through the countless possible moves on the Go board and chose the most efficient path, one requires capabilities beyond the conventional computing powers; capabilities only our minds have (or so we thought), such as extremely accurate image and pattern recognition and insight, all of which we thought granted us superiority over the artificial minds we created.

In October 2015, a software called “AlphaGo®” became the first computer to beat a professional human Go player in an un-handicapped game of Go (Silver and Hassabis, 2016). AlphaGo’s victory is probably one of the most significant demonstrations of the capabilities of an AI. Firstly, it shows that AIs are beginning to surpass us at things where success is dependent on strategy as well as calculation. Things we classify as a “game”, from stock exchange to conflicts, from contract negotiations to hostage situations. Second, AlphaGo developed strategies on its own, through playing millions of games against itself. These feats sent the chills down the spines of those who fear that AIs will overpower us in the future.

We humans accelerate the future with our minds. This is a strength and a weakness. Often, our predictions of the future are highly inaccurate. Based on predictions from a book called ‘The World in 2010’, published in 1976, we should have been living above and below the surfaces of three planets as of five years ago. Predictions regarding the future of AI are equally likely to be off base.

To avoid premature regulation over AI, we should be studying and searching for the meaningful point in time when a broader anxiety about AI becomes a genuine concern. The study of a point of ripeness, a ‘threshold ability test,’ asks when AI could really bring about concrete disadvantages that might counter-balance the demonstrated contribution to economic efficiency and welfare.

In the absence of such an objective benchmark marking the point in time when AI becomes a competitor with the human mind, regulators could easily jump the gun in regulating AI, which would lead to irreparable harm in total welfare of human societies.

Most of what we consider AI today is really our own intelligence re-formatted and re-cycled, with the help of computers lacking any skill of learning or consciousness of being. Regulation at this stage would be perverse. The economic efficiency potentials of AI should be set entirely free at this point in time, allowing us to actively and aggressively research appropriate goals for them which would not result in the extinction of humankind.

If you think our future robot overlords will one day thank us for ignoring the risks and under regulating, think again. On the one hand, any issues we may face from AIs will likely result from humanity failure to effectively direct AIs to our needs, not because we switched to a defensive AI regulation regime too early. On the other hand, at some point of time in the not too distant future, natural, human-related or external factors may threaten the fate of the Earth, and we may need AI to save the planet and us. One hopes that society has not pulled the hand brakes on the wheels of AI too early, fearing our own active imagination.

#### AI controls are inevitable, but will be gradual and incrementally ratchet up over time---they’ll start with liability and transparency, then move into specific applications, solving downside risk without imposing premature and ineffective regulation

Chris Reed 18, Professor of Electronic Commerce Law at Queen Mary, University of London, LLM from the University of London, “How Should We Regulate Artificial Intelligence?”, Philosophical Transactions of the Royal Society B, Volume 376, Issue 2128, 9/13/2018, https://royalsocietypublishing.org/doi/10.1098/rsta.2017.0360

Using artificial intelligence (AI) technology to replace human decision-making will inevitably create new risks whose consequences are unforeseeable. This naturally leads to calls for regulation, but I argue that it is too early to attempt a general system of AI regulation. Instead, we should work incrementally within the existing legal and regulatory schemes which allocate responsibility, and therefore liability, to persons. Where AI clearly creates risks which current law and regulation cannot deal with adequately, then new regulation will be needed. But in most cases, the current system can work effectively if the producers of AI technology can provide sufficient transparency in explaining how AI decisions are made. Transparency ex post can often be achieved through retrospective analysis of the technology's operations, and will be sufficient if the main goal is to compensate victims of incorrect decisions. Ex ante transparency is more challenging, and can limit the use of some AI technologies such as neural networks. It should only be demanded by regulation where the AI presents risks to fundamental rights, or where society needs reassuring that the technology can safely be used. Masterly inactivity in regulation is likely to achieve a better long-term solution than a rush to regulate in ignorance.

This article is part of a discussion meeting issue ‘The growing ubiquity of algorithms in society: implications, impacts and innovations'.

1. Introduction

It is hardly surprising that there has been a sudden interest in regulating artificial intelligence (AI). AI technology has moved from the research laboratory to become part of our daily lives with remarkable speed. We have seen the first fatal accident involving an autonomous vehicle [1,2], AI applications are analysing images to detect potentially cancerous cells [3] and numerous other implementations are in place or in the pipeline.

The introduction of AI technologies creates societal risks. Although AI technologies aim to augment or replace human decision-making, leading to fewer wrong decisions, there is no doubt that AI will still get it wrong sometimes. And the ways in which AI gets it wrong are likely to be very different from the ways in which a human would make mistakes. This feels dangerous to society. We want to know the kinds of risks we are running, and purely statistical arguments that AI makes us safer are not convincing to the wider population.

Good regulation would improve our perception of safety, and also our perception that humans remain in control. It could also mitigate any new risks which the use of AI creates. But bad regulation risks stifling the development and implementation of useful AI solutions, perhaps even without improving safety and control. Thus, we need to understand what regulation can and cannot do so that we can shape it appropriately. It is also important that those who produce and use AI technologies are actually able to comply with regulation, and that regulation does not stifle worthwhile advances in the technology. Outside specifically regulated sectors, the general approach of law and regulation is that innovation is freely permitted, but that those responsible must bear the consequences if that innovation causes certain types of harm. If our existing law and regulation can deal with AI innovation in that way, no immediate change is needed. The argument, if one exists, for requiring all those who adopt an AI technology to demonstrate that it achieves a higher standard of performance and reliability than other innovations has not yet been made out.

2. The problem

Fundamentally, the problem which regulation must seek to solve is that of controlling undesirable risks. For any truly useful AI technology, there is likely to be empirical evidence that it is more cost-effective and, ideally, more accurate at making decisions than the human-based solution it replaces. But that evidence will be based on comparison with the human-based solution, whose deficiencies are currently tolerated by society. An AI-based solution will have its own deficiencies, and these will be less acceptable if they produce wrong answers where a human would have decided correctly. Regulation ought therefore to focus on any new risks which the AI solution presents, recognizing that some of these risks will be as yet unknown.

Some commentators are so alarmed by the prospect of unknown risks that they have proposed the establishment of a general regulator for AI [4]. But, there are three strong arguments against introducing new, generally applicable legal and regulatory obligations at this moment.

First, any regulatory body needs a defined field of operation, and a set of overriding principles on the basis of which it will devise and apply regulation. Those principles will be based on mitigating the risks to society which the regulated activity creates. Until the risks of AI are known, at least to some degree, this is not achievable. Regulation cannot control unknown risks, and devising a regulatory mandate on the basis of speculative risks seems unlikely to produce successful results.

Second, lawmakers are generally unsuccessful at prospective regulation, particularly in technology fields. The history of legislating prospectively for the digital technologies is one of almost complete failure [5].

Finally, and most importantly, a regulatory regime which aimed to deal with all uses of AI technology would be impossibly wide in scope. The range of potential applications is far too diverse, and it would be foolish to apply the same regulatory regime to autonomous vehicles as to smart refrigerators which order groceries based on consumption patterns. Probably, there is no plausible, let alone compelling, reason to regulate smart refrigerators at all. A regulatory project of this kind would risk becoming a project to regulate all aspects of human life.

The better strategy is to approach the problem incrementally. Some of the risks likely to be posed by AI technology are already apparent, and legal or regulatory action can be taken now to deal with them. Others will make themselves known as the technology becomes more widely used and can be dealt with in the same way. At some point, it will become apparent whether specific regulation is needed, and if so the scope and focus of that regulation will be possible to devise. But at present, we are some distance away from that point.

### 2NC---Good AI---Link

#### It’s impossible to only regulate ‘bad’ AI without stifling the ‘good’. Tech is too far off and unpredictable AND humans have no current baseline for understanding, let alone assessing or guiding, productive means. Premature regulation drives straight to extinction.

Gönenç Gürkaynak 18, Founding Partner of ELIG Gürkaynak Attorneys-at-Law, LL.M. from Harvard Law School, İlay Yılmaz, Partner at ELIG Gürkaynak Attorneys-at-Law, and Güneş Haksever, LLM from Istanbul Bilgi University, Attorney at IBM Turkey, “Stifling Artificial Intelligence: Human Perils”, Computer Law & Security Review, Volume 32, Issue 5, 12/12/2018, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3285264> [note – ‘ANI’ = ‘artificial narrow intelligence’]

3. Protecting human dominance through regulation or setting tailored goals to maintain human existence

Having a timeless and robust definition of AI is of paramount importance when thinking of regulating AI. One cannot regulate a certain subject without establishing a robust definition of what it regulates. The ambiguity of the definition of AI is mainly due to the “I”, “intelligence” of the AI. Concepts like “intelligence”, “consciousness”, “free will” and “soul” accompanying it are yet to have deterministic definitions although the greatest minds of our planet have tackled them for thousands of years (Burkeman, 2015).21

Neither any of the foregoing definitions of AI, nor many other definitions in the academia presents adequate definitions that can be satisfactory when regulation techniques are considered. In addition, the lack of definition is only one of the problems regulators will face; they will need to tackle liability gaps, control and transparency problems (Danaher, 2015).

In light of the foregoing, our primary statement stands firm: it is very early to begin thinking about regulating AIs or AI studies, particularly if such regulations may hinder developments that could prove essential for human existence. The turning point in AI development will probably be the development of ANIs, which should be encouraged through regulation, not restricted. However, if humanity fails in establishing adequate safe guards for ANIs, science fiction may turn into reality. Goertzel and Pitt (2012) call this the ‘AGI Sputnik moment’.

3.1. The great AI hype of 2015

Elon Musk’s and Stephen Hawking’s fears, Bill Gates’ cautious approach, Kurzweil’s optimistic take and Bostrom’s realistic analysis on the future that will probably be painted by AIs point to a single fundamental and existential dilemma: Are we going to be extinct because of AIs or will we maintain our existence with the help of AIs?

The cycle of extinction and rise of species may be the greatest success of evolution: ensuring the continuity of life. Over 90% of all species that ever existed on Earth went extinct and humanity’s fate will be no different, unless we come up with methods to achieve transcendence over evolution.22 Urban (2015) also treats this concept with a less theatrical manner and stresses two major outcomes for a possible ‘ASI Sputnik moment’. He states that either the introduction of ASIs will make immortality possible for our species or it will drive the human race into extinction.

Evolution has granted us our strongest instinct: survival. Instinctively we are in a never-ending war with nature, aiming to prolong our existence. In the abstract, the field of medicine solely exists for this purpose. Therefore, instinctively we will either try to eliminate the existential threat that ASIs might pose against us when we face the threat itself or try to eliminate a potential threat prematurely and in so doing cause our own extinction.

3.2. Reshaping perception on law

We may be living in the dawn of the age of artificial intelligence today. Consequently, the legal landscape surrounding our lives will require rethinking, as the case was with every big leap in technology. The industrial revolution brought conveyor belts and mechanical manufacturing processes operated by workers for longer and longer hours, which ended in myriad clashes between proletariat and employers. Hence, we developed labour laws, bringing a humanitarian minimum standard for the workers that were suffering from extreme working conditions. Similar legislative efforts followed each time when technologies required us to adapt new paradigms they introduced, technologies such as electricity, telegraph, telephone, railroad, automotive, television, and computers and so on. . . Below we will seek answers to some exemplary questions as to how AI might reshape our thinking, in terms of certain matters of current and prospective law.

3.2.1. Liability on damages

There are very few laws or regulations that address the challenges raised by AIs, and no courts appear to have developed standards so far, addressing who is legally responsible if an AI causes harm. The diversity and richness of individuals and firms that participate in the creation of an AI will make it difficult to identify the persons under liability. Certain technologies used in the development of an AI may date back to years before such AI is developed. Further, the developers of such technology may never have thought that one day, someone might incorporate their creation into any AI system. In such circumstances, it would be unfair to hold the developer of such technology responsible for a possible tort.

National and international laws do not recognize AI as a legal person. Therefore, current legal systems cannot hold them liable for the damages they might cause. However, what if an AI was fully autonomous and aware of its actions, causing harm knowingly and willingly?

This brings us back to the debate on consciousness. A conscious AI should naturally be liable for its actions. However, how can that be possible if we keep refraining from coming up with an adequate definition of what an AI is as far as legal ‘beings’ are considered? Should we ascribe legal personhood to them? (Paulius et al., 2015).

3.2.2. Intellectual property

IP law and its application places human initiative at its core. Berne Convention of 188623 requires an ‘author’ and an ‘artistic work’ to begin talking about intellectual property. While there is no limitation as to what form a ‘work’ can assume as long as humans can perceive it, an author must be a ‘human’. A San Francisco court applied and materialized this concept in 2015 by deciding in a lawsuit by PETA, the renowned organization defending animal rights, against David John Slater, a professional photographer, that a macaque money cannot own copyright to a selfie it took using the photographer’s camera (Kravets, 2016). What about AIs though? Can they own copyrights to the artistic works they create? Should law consider them as ‘individuals’?

3.2.3. Copyright and AI

Currently, a handful of AI applications are capable of producing works that resemble ‘art’, such as Deep Dream and the Cybernetic Poet.

Google’s® researchers developed DeepDream® to create a human-like image recognition software to identify certain things through mimicking human cognitive abilities. DeepDream uses Google’s artificial neural networks protocol to discern and process images of things to learn what they look like, such as a cat.

Google’s developers taught DeepDream what a cat looks like by showing millions of images of cats. Then they put DeepDream’s learning and identifying abilities to test by asking it to identify cats in pictures with cats and if found amplify them, introducing a feedback loop to work on. Then the developers introduced a random image to DeepDream and asked it to enhance the image in such a way as to elicit a particular interpretation. This method enabled the developers to understand whether DeepDream understood the essence of the things it learns. As a result, DeepDream searched in the images provided for all the things the developers trained it to recognize and when it found the tiniest bit of reference, it enhanced the relevant reference to make it look like the thing it found similar. The resulting images were surprisingly close to works of art. Few predicted this phenomenon, including DeepDream’s developers.24

Ray Kurzweil developed a poem software in mid-80s, a computer-implemented method of generating a poet personality that reads poems and generates analysis models to build its personality, and ultimately writes poems; the ‘Cybernetic Poet’. Cybernetic Poet is “provided with an input file of poems written by a human author or authors. It analyses these poems and creates a word-sequence model based on the poems it has just read. It then writes original stanzas of poetry using the model it has created.” (Bridy, 2012)

Now, who owns the copyrights of the artistic works created by these AIs?

As explained, current law cannot vest ownership of the copyrights to an AI, as it is not ‘human’. However, the laws of the United Kingdom make express provision for copyright in computer-generated works and introduce the following definition: ‘works generated by a computer in circumstances such that there is no human author’.25 The copyright in such works under UK law vests in ‘the person by whom the arrangements necessary for the creation of the work are undertaken’. Concordantly, Irish Law adopts the same principles.26 However, the UK and Irish approaches to the issue surrounding copyright ownership of computer-generated works and not the works of an AI. Therefore, they overlook the possibility of ‘non-human’ copyright ownership, ruling out the possibility of an AI that develops its own creative abilities. Who will have the ownership then?

3.3. Regulate and dominate?

A regulatory oversight and governmental intervention is a need when the development of AI is considered.27 It is not common to hear a Silicon Valley entrepreneur who operates on the frontiers technological advancement, urge governments to directly intervene with a developing technology in the hope of preventing humanity to do ‘something stupid’. When such thing happened in October 2014, it created a ripple effect and caused ‘The Great AI Panic of 2015’ (Sofke, 2015), which eventually led an institution called ‘Future of Life Institute® (FLI)’ to issue an open letter signed by Elon Musk, Stephen Hawking, hundreds of AI researchers in addition to many individuals representing U.S. government (Russel et al., 2015). FLI urged expanded research on how to contain AI systems within the walls of human benefit, including premature regulation. However, FLI used statements such as ‘AI systems must do what we want them to do’, ‘We should identify research directions that can maximize societal benefits’ and ‘AI super-intelligence will not act with human wishes and will threaten humanity’ while providing a research roadmap for AI researchers.

While the ‘we’ hints at a desired ownership over a technology under development (i.e. AI) and the ‘we’ implies superiority over ‘others’ in determining how a technology will be socially beneficial for humanity. It also begs the questions, ‘Who are you to claim that you have the capacity to force your desires over the entire human race, and who are you to claim that you can decide what is socially beneficial for us?’ Stating that an ASI will definitely be against the humanity’s welfare is an unexpectedly ignorant claim, allegedly coming from some of the greatest minds on Earth.

We experienced this line of thought when the Internet reached the masses, disrupting the status quo by lifting the boundaries of communication and information exchange and blurring the sense of control over disseminated information and access to such. The idea of an open interconnected network of networks that is not in anyone’s control or under any jurisdiction challenged lawmakers, policy makers and judiciary bodies and it still does. We have still been unable to set out universal rules on Internet (except DNS policies, where all stakeholders over Internet govern these policies through ICANN, a non-governmental organization) for almost 60 years. It would be very naïve to think that we can regulate AI policies, while AI is still in its infancy.

There is almost a consensus within the scientific AI community that definitive predictions on the future of ASI are impossible at this stage, simply because we are so far from creating an ASI, let alone understanding its implications.

3.3.1. Current and prospective regulatory efforts

Trying to anticipate ASI’s desires from where we stand now in terms of AI development is very similar to a chimpanzee trying to anticipate our motives when we crush an onion to remove its skin. Therefore, aiming to establish regulations to prevent ASIs from obliterating us is a hopeless endeavour. However, this line of thought may eventually lead regulators to prevent AI research from developing an AGI, fearing that it will break free from the chains of our capacity and become an ASI by itself. For example, John FrankWeaver, an attorney working in the field of AI law, praised the regulators at California when they intervened with Google’s self-driving cars and required test drivers to be present in these cars. He even claimed that this as a ‘wonderfully swift governmental response to autonomous technology and artificial intelligence’ while further supporting four states (Mississippi, Florida, Nevada and California) for passing restrictive regulation on autonomous cars that are not even on the market yet (Weaver, 2014).

3.3.1.1. Legislative efforts for autonomous vehicles. Nevada is the first U.S. state to enact a legislation authorizing the operation of autonomous vehicles in 2011 and was then followed by six other states, with many other states in still pending status with reference to their respective autonomous vehicle legislations. Tennessee among those who did enact such legislations stands out with its enabling and refreshing legislation wherein it prohibits local governments from banning the use of motor vehicles equipped with autonomous technology (Legislatures, 2016).

Throughout the world, legislators are working to incorporate autonomous (driverless) vehicles into their legislations to allow this thriving technology bloom and develop further, which brings hope.

The Convention on Road Traffic,28 of the United Nations, ratified by 73 countries, is in the process of amendment to allow automated vehicles on roads in many countries. European Road Transport Research Advisory Council published the roadmap for automated driving for Europe.29 German Federal Highway Research Institute published a report on the status of German legal landscape pertaining to vehicle automation technologies, indicating the areas of improvement on research, legislation and involvement of government agencies.30 Netherlands, Sweden, Japan and many other developed countries are actively working on improving the conditions of economic and legislative environment to enable swift development and consequently to reap the benefits of being involved in the forefront of innovative technologies.

While governments are honing in on preparing the legislative grounds for the operation of autonomous vehicles, academia adopts a wider approach and handles the concept in a wider manner, and works on determining the adequate policies for robotics and AI.

3.3.1.2. The RoboLaw project. The main objective of the RoboLaw project (“Regulating Emerging Robotic Technologies in Europe: Robotics facing Law and Ethics”) is to understand the legal and ethical implications of emerging robotic technologies and to uncover whether existing legal frameworks are sufficient in light of the rapid expansion of robotics technologies.31

The project was launched in March 2012 and funded by the European Commission (Paulius et al., 2015). The project produced the “Guidelines on Regulating Robotics”, which was then presented to the European Commission, to create the legal framework surrounding the development of robotic technologies in Europe.

The RoboLaw Project considered industrial robots, domestic robots, care robots, medical and surgery robots, autonomous vehicles, and humanoids/animaloids.The report discussed five essential legal areas for robotics: (i) health, safety, consumer, and environmental regulations; (ii) liabilities; (iii) intellectual property rights; (iv) privacy; and data protection and (v) capacity for legal transactions (Anon, 2015).

3.3.1.2.1. Health, Safety, Consumer and Environmental Regulation. The report identifies that common usage of robotics in hospitals, homes, commercial areas and our daily lives will require a new wave of legislations to cope with the prospective health and safety matters.

3.3.1.2.2. Liability. The report argues that imposing substantial liability on manufacturers, owners or users of robots for damages caused to third parties may increase safety while inducing wider social acceptance of robots. However, the report also argues that such approach on a liability regime may result in the displeasure of tech industry, consumers and, in the end, the general public, and may slow down the development of AI and robotics technologies. Therefore suggests a balanced approach between the interests of manufacturers, users, and third parties, and between risk regulation and stimulation of innovation, to encourage research, innovation and experimentation on these technologies, for increasing welfare in health, transport, commerce and other areas of business.

3.3.1.2.3. Intellectual Property Rights. RoboLaw Project indicates the lack of legal provisions that specifically apply to robotics. RoboLaw Project states that further research would be beneficial to determine whether the current application of intellectual property rights sufficiently meets the needs of the robotic industry and society.

3.3.1.2.4. Privacy and Data Protection. The RoboLaw Project suggests implementation of legal requirements into the robot’s software and interface through the ‘privacy by design’ approach, such as data security through data encryption and data access control in order to comply with the data protection requirements.

3.3.1.2.5. Capacity for Legal Transactions. The report stresses the lack of legal personality of robots and indicates that robots are seen as ‘mere tools’ to carry out commands that can, directly or indirectly, be attributed to human beings. Consequently, this approach requires the legal responsibility for robot actions to rest with their human ‘masters’.

It is possible to attribute legal personality to robots through legislative effort. Non-humans such as corporations, associations, and foundations gain their legal personalities through registration. The registration principle could be extended to robots and AIs (including requirements how robots can prove their registered identity); the capability of owning property is less easy to create, although legal constructions could be devised to accommodate this.

The report concludes with indicating that if these issues concerning legal personality are resolved at a certain point in time, more practical requirements and rules pertaining to legal acts will come into play, such as implementing legal conditions into the machines to make it possible for them to enter into a contract.

Lawmakers need to familiarize themselves with the potential benefits of AIs. Strict rules may prevent humans from the possible damages of AIs. However, these rules will also dampen possible improvements. Therefore, lawmakers should consider the balance between protection of humanity and development in technology.

4. Conclusion

When aiming to regulate currently non-existent technologies, we must avoid this approach at all costs. Putting restrictions on developing technologies based on our personal presumptions might indeed help us to avoid extinction at the hands of ‘evil robots’, but it might also cause our extinction due to natural reasons, such as evolution by making it harder for the human race to use technology to adapt.

Based on the statements of Elon Musk, SteveWozniak, Bill Gates, Bill Joy, Stephen Hawking and FLI’s open letter, it is clear that what they all fear is an ‘unfriendly AI’ and what they all want is a ‘friendly AI’ in the abstract.

The terms ‘friendly’ and ‘unfriendly’ do not refer to a personal trait of an AI system. These terms refer to whether the actions of an AI will have a positive or a negative impact on humanity (Urban, 2015). This is because AIs are computers and they do not have human values. We tend to anthropomorphize32 AI and attribute them with our moral values such as ‘good and evil’, ‘moral and immoral’ that are formed by our consciousness. These attributes developed only after thousands of years of social interaction. AIs will not share these human traits unless we specifically create them to do so. They operate on a task and goal oriented manner. To illustrate this point, for instance, there is an AGI, whose main task is to ensure that trees in a certain pine tree plantation are under protection from alien spores to keep the tree DNA as pure as possible. We should not be surprised when such an AGI takes drastic measures as far as obliterating the entire flying bug population in the area. One who is unaware of the goals of this AGI might easily label it as ‘evil’ and a ‘danger to humanity’ as he/she has no preconception on what the AGI’s motives or goals were. Similarly, a chimpanzee fearing that the crushing of an onion is a sign of aggression might attack us. Ironically, this view is very similar to the perspective of those who propose premature regulation of AIs.

#### Regs block innovative start-ups AND make advanced neural nets infeasible

Daniel Castro 19, Vice President at the Information Technology and Innovation Foundation (ITIF) and Director of ITIF's Center for Data Innovation, M.S. in Information Security Technology and Management from Carnegie Mellon University, B.S. in Foreign Service from Georgetown University, and Michael McLaughlin, “Ten Ways the Precautionary Principle Undermines Progress in Artificial Intelligence”, Information Technology & Innovation Foundation, 2/4/2019, https://itif.org/publications/2019/02/04/ten-ways-precautionary-principle-undermines-progress-artificial-intelligence

HOW POLICIES BASED ON THE PRECAUTIONARY PRINCIPLE IMPACT AI

Policies based on the precautionary principle can impact AI in several ways. They can make it more expensive to develop AI, limit the testing and use of AI, and even ban certain applications. Clearly nations have the right to impose any regulations they chose (assuming they do not violate World Trade Organization rules or other global treaty obligations). But they should not delude themselves into believing that regulatory regimes based on the precautionary principle will not limit increased productivity, competitiveness, and innovation.

To provide a more detailed discussion of the negative effects policies based on the precautionary principle can have on AI, the following section analyzes the effects of policies discussed earlier in this report. In many cases, these policies have multiple negative effects on AI.

1. Slower and More Expensive AI Development

Policies based on the precautionary principle both slow and make the development of AI more expensive. For example, if all fifty U.S. states had laws such as New York’s, which requires autonomous vehicle firms to perform road testing under the paid supervision of police, testing such vehicles would be more expensive. Moreover, proposals to require even non-medical algorithms to undergo pre-market trials would hurt the development of AI because such trials are time-consuming and expensive. Such proposals may also make AI systems that use machine learning, and thus may change frequently and need more testing, significantly less viable because such systems could constantly need to go through a new approval process.96 Finally, policies that increase the cost of developing AI would likely discourage innovation in AI by creating a substantial barrier to entry for startups that lack sufficient funding to cover the cost of proving their AI system is safe. For example, the GDPR has dampened investment in European technology startups and led to a 30 percent decrease in the market share of small online advertising firms that lack the resources to easily comply with the regulation.97

Restrictions on one AI technology can also limit ways to develop another AI technology. For example, researchers in Germany are using drones hovering hundreds of meters above highways to record the movements of vehicles. This data can help develop simulations to test autonomous vehicles; such simulations are important tools for improving the safety of autonomous vehicles because otherwise they would need to travel billions of miles for safety validation.98 While this novel method of collecting data to validate the safety of autonomous vehicles may or may not prove valuable, implementing it in the United States would be would be difficult to do at scale until the FAA implements its new rules that allow out-of-sight drone flights and flights over people.99

2. Less Innovation

AI will spur innovation so policies that limit the development of AI will limit innovation.100 For example, proposals to ban or limit the introduction of autonomous vehicles would also limit the generation of new businesses, business models, and ways to do deliver services through the “passenger economy.” The passenger economy, a term coined by Intel and research firm Strategy Analytics, “is the economic and societal value that will be generated by fully autonomous…pilotless vehicles.”101 The firms envision a world where a significant portion of vehicle ownership is replaced by fleets of autonomous vehicles that provide on-demand transportation. Productivity would also increase as autonomous vehicles free employees to work during their commutes and autonomous trucks to operate more efficiently. The firms estimate the value of this economy could be $7 trillion by 2050.102 Nations that ban autonomous vehicles will not experience the benefits of such an economy.

3. Lower-Quality AI

There is often a negative correlation between making an AI system more explainable and its accuracy.103 As a result, any policies that require AI to be explainable could lead to less accurate AI. For example, researchers at Mount Sinai Hospital in New York developed an AI system called Deep Patient that can predict whether a patient is contracting any of a wide variety of diseases.104 The researchers trained Deep Patient on the health data from 700,000 patients, using hundreds of variables, such as test results, which allow it to predict diseases such as schizophrenia—which doctors struggle to predict—extremely well.105 Even though its operators can verify its accuracy by measuring outcomes, such as if a person is developing a disease, it is difficult for its own developers to know why it made a particular decision.106

Many sophisticated forms of AI pose a similar problem. Developing an AI system capable of explaining itself or justifying its decisions is an incredibly challenging technical feat, so much so that the U.S. Defense Advanced Research Projects Agency (DARPA) devoted $75 million in 2017 to research how AI could achieve it.107 Some groups are skeptical that requiring explainability would chill innovation. They cite DeepMind, a British company owned by Google parent-company Alphabet, developing an AI system in 2018 that can analyze eye scans to predict diseases while also providing doctors a map of the features of disease it sees, such as hemorrhages.108 However, the fact that one of the world’s leading AI companies could achieve a form of explainability in a system it worked on for nearly two years is not evidence that all other operators should or would be able to achieve explainability for their AI easily.109 To be clear, it is legitimate for companies, such as IBM, to create internal requirements for AI explainability.110 Requiring all firms to meet such a standard, however, would create a barrier to adopting AI, because not all AI systems are alike and not all businesses have a similar level of expertise.

Nonetheless, it is important for AI operators to continually assess their AI system’s accuracy to ensure it is generating or predicting the correct outcomes. The other option is to allow only AI applications that operators can explain; this would lead to AI systems that consider fewer variables and that use simpler algorithms to make decisions. In turn, this would reduce the effectiveness of AI that can generate significant impacts such as identifying a terminal illness before a doctor can.

#### It nukes R&D at the small business and individual levels---they’re key

Dr. Jeremy Straub 21, PhD, Assistant Professor in the North Dakota State University Department of Computer Science and NDSU Challey Institute Faculty Fellow, “Would Regulation Prevent AI From Becoming an Evil Overlord?”, Dakota Digital Review, 10/1/2021, https://dda.ndus.edu/ddreview/would-regulation-prevent-ai-from-becoming-an-evil-overlord/

WHO DOES REGULATION REALLY PROTECT?

Achieving most of these benefits will require a lot more research and development. Regulations that make it more expensive to develop AIs or prevent certain uses might delay or forestall those efforts. This is particularly true for small businesses and individuals—key drivers of new technologies—who are not as well equipped to deal with regulation compliance as larger companies.

In fact, the biggest beneficiary of AI regulation may be large companies that are used to dealing with it, because startups will have a harder time competing in a regulated environment. Even ambiguity regarding regulation and what aspects of AI are regulated may be problematic, as it may cause people to avoid innovation to avoid risking inadvertent ensnarement by vague regulations and potential penalties.

Humanity faced a similar set of issues in the early days of the internet. But the United States actively avoided regulating the internet to avoid stunting its early growth.[39] Elon Musk’s PayPal and numerous other businesses helped build the modern online world while subject only to regular human-scale rules, like those preventing theft and fraud. Similarly, no special rules were rolled out to govern early software businesses, such as Microsoft, in their burgeoning years, that have gone on to become industry titans.

### Democracy Bad – 1NC

#### Democratic peace is statistically disproven---it’s conflict driving

Dr. Daina Chiba 21, Associate Professor of Political Science in the Department of Government and Public Administration at the University of Macau, Ph.D. in Political Science from Rice University, LL.M in Jurisprudence and International Relations from Hitotsubashi University, and Dr. Erik Gartzke, Professor of Political Science at the University of California, San Diego, PhD in Political Science from the University of Iowa, “Make Two Democracies and Call Me in the Morning: Endogenous Regime Type and the Democratic Peace”, 2/19/2021, https://dainachiba.github.io/research/make2dem/Make2Dem.pdf

The democratic peace—the observation that democracies are less likely to fight each other than are other pairings of states—is one of the most widely acknowledged empirical regularities in international relations. Prominent scholars have even characterized the relationship as an empirical law (Levy 1988; Gleditsch 1992). The discovery of a special peace in liberal dyads stimulated enormous scholarly debate and led to, or reinforced, a number of policy initiatives by various governments and international organizations. Although a broad consensus has emerged among researchers regarding the empirical correlation between joint democracy and peace, disagreement remains as to its logical foundations. Numerous theories have been proposed to account for how democracy produces peace, if only dyadically (e.g., Russett 1993; Rummel 1996; Doyle 1997; Schultz 2001).

At the same time, peace appears likely to foster or maintain democracy (Thompson 1996; James, Solberg, andWolfson 1999). A vast swath of research in political science and economics proposes explanations for the origins of liberal government involving variables such as economic development (Lipset 1959; Burkhart and Lewis-Beck 1994; Przeworski et al. 2000; Acemoglu and Robinson 2006; Epstein et al. 2006) and inequality (Boix 2003), political interests (Downs 1957; Bueno de Mesquita et al. 2003), power hierarchies (Moore 1966; Lake 2009), third party inducements (Pevehouse 2005) or impositions (Peceny 1995; Meernik 1996), geography (Gleditsch 2002b), and natural resource endowments (Ross 2001), to list just a few examples. Each of these putative causes of democracy is also associated with various explanations for international conflict. Indeed, some as yet poorly defined set of canonical factors may contribute both to democracy and to peace, making it look as if the two variables are directly related, even if possibly they are not.

We seek to contribute to this literature, not by proposing yet another theory to explain how democracy vanquishes war, but by estimating the causal effect of joint democracy on the probability of militarized disputes using a quasi-experimental research design. We begin by noting that some of the common causes of democracy and peace may be unobservable, generating an endogenous relationship between the two. Theories of democracy and explanations for peace are at a formative state; it is not possible to utilize detailed, validated and widely accepted models of each of these processes to assess their interaction. Indeed, to a remarkable degree democracy and peace each remain poorly understood and weakly accounted for empirically, despite their central roles in international politics. We address the risk of spurious correlation by applying an instrumental variables approach. Having taken into account possible endogeneity between democracy and peace, we find that joint democracy does not have an independent pacifying effect on interstate conflict. Instead, our findings show that democratic countries are more likely to attack other democracies than are non-democracies. Our results call into question the large body of theory that has been proposed to account for the apparent pacifism of democratic dyads.

#### Democracy causes Nigerian state collapse and civil war

Dr. Moses E. Ochonu 19, Cornelius Vanderbilt Chair in History and Professor of African History at Vanderbilt University, PhD and MA in African History from the University of Michigan, BA in History from Bayero University, Graduate Certificate in Conflict Management from Liscomb University, “Why Liberal Democracy is a Threat to Nigeria’s Stability”, Logos: A Journal of Modern Society & Culture, May 2019, http://logosjournal.com/2019/liberal-democracy-is-a-threat-to-nigerias-stability/

In 2015, Nigeria, a country of about 190 million, spent $625 million to conduct federal and local elections. By comparison, India, with a population of 1.2 billion, spent $600 million on its 2015 election, according to figures released by the Electoral Commission of India (ECI).[1]

In 2019, the election budget of Nigeria’s Independent Electoral Commission (INEC) rose to $670 million. This represents about 2.5 percent of Nigeria’s $28.8 billion budget for 2019, a portion of which is being financed through borrowing. To put the electoral spending in context, more than half of the country subsists on about a dollar a day, and the country recently acquired the dubious distinction of being named the poverty capital of the world, with more people living in extreme poverty there than in any other country.[2] Key infrastructures and services such as roads, railway, electricity, water supply, healthcare, and education are severely inadequate, requiring urgent investments and interventions.

Election-related expenditure is expected to rise in the near future as INEC implements a wider slate of digital technologies to combat manipulation and improve the integrity of the electoral process. For comparison, Nigeria typically devotes about 7 percent of its budget to education. And yet Nigeria continues to maintain a four-year election cycle, with smaller by-elections occurring in between. This electoral calendar guarantees that about $1 billion is spent on elections every four years. As the electoral price tag has grown, democratic dividends have plummeted.

Nigeria’s predicament is a microcosm of the phenomenon of rising financial costs of elections in Africa and diminishing returns on democracy. Across the continent, the cost of electoral democracy is increasing and threatens the delivery of social goods. As African countries battle myriad socioeconomic challenges, the question needs to posed: is it wise for these countries to continue to spend a large percentage of their revenue every four or five years on a political ritual with fewer and fewer positive socioeconomic consequences for their populations? Is this expensive, periodic democratic ritual called election worth its price?

It is not only the monetary cost of elections that now threatens to defeat their purpose and engender disillusionment and, along with disillusionment, the erosion of trust in the state and its ability to produce and distribute public goods. The social cost of periodic elections has been arguably greater, depleting, with each election cycle, the residual stability of the state and the credibility of its institutions.

Elections conducted in Nigeria since the return of civilian rule in 1999 have brought with them anxiety, tension, death, violence, and dangerous rhetoric that, taken together, have frayed the national political and social fabric. Elections have widened fissures and intensified preexisting primordial cleavages.

I can recall no electoral cycle since at least 2003 that was not been accompanied by fears of Nigeria’s disintegration or at the very least the acceleration of its demise. In 2007 and 2011, post-election violence claimed hundreds of lives in Northern Nigeria as supporters of then candidate Muhammadu Buhari rioted after his loss. In the 2019 presidential and national assembly elections, at least 46 people were reported to have died from election-related violence. In the state assembly and governorship elections two weeks later on March 9, 2019, another 10 people died across five states in what the Sunday Tribune newspaper described in its headline as “another bloody election.”[3]

Two riders below the same Sunday Tribune headline encapsulate the turbulent character of Nigerian elections. One was “Thugs, vote buyers, arsonists take over on election day”; the other was “Nigerians condemn militarization of elections in Rivers, Bayelsa, Kwara, Akwa Ibom, Benue,” a reference to the government’s deployment of soldiers and other military assets to opposition strongholds before and during the election. The involvement of soldiers and other military personnel in the election was a brazen violation of Nigeria’s Electoral Act, an action which many observers interpreted as the incumbent administration’s effort to use its might to manipulate the election in states held by the opposition.

Every election cycle in Nigeria sees massive, fear-induced demographic mobility as members of different ethnic groups and religions relocate to areas considered dominated by their kinsmen and co-religionists to await the conclusion of elections that often degenerate into communal clashes especially in the volatile north of the country.

Periodic national elections have thus worsened Nigeria’s notoriously frail union and caused apathy and discontent. The Nigerian people, the major stakeholders in Nigeria’s democracy, have grown weary of being periodically endangered and rendered pawns in an elaborate elite ritual with little or no consequence for their lives.

Electoral aftermaths have not improved economic conditions or strengthened the capacity of citizens to hold elected leaders accountable. Moreover, as I shall discuss shortly, the familiar abstract freedoms that democracy, lubricated by periodic elections, can confer on citizens who participate in such exercises, have eluded Nigerians.

The result has been noticeable apathy represented most poignantly by voter turnout, which declined from a peak of 69.1 percent in 2003 to 46.3 percent in 2015 and to about 35 percent in 2019. In the same 2019 election cycle, turnout declined to less than 20 percent in the governorship and state assembly elections, with many Nigerians on social media stating that they had lost faith in the electoral process and that the official results of the presidential elections two weeks earlier had shown that their votes would not count towards the declared outcome.

Voter apathy alone is not an indication of democratic disillusionment but it can portend or indicate something more devastating: diminishing trust in the state, its institutions, and its processes.

Such a trust deficit exists already and it predated the return of civilian rule in 1999 after about two decades of military dictatorship. However, by all theoretical formulations, such a cumulative loss of confidence in the transactional sociopolitical contract between the state and citizens should be corrected by the democratic ideals of voting, representation, and accountability. This has not happened in Nigeria. In fact, the opposite scenario is visible: a negative correlation between successive electoral cycles and citizens’ trust in the Nigerian state. Therein lay the paradoxical consequences of democratic practice in Nigeria.

If elections are increasingly burdensome as they have become in Nigeria, the corrective potential of democracy, broadly speaking, is lost. Citizens consequently lose faith in the state and resort to self-help, including criminal self-help. That is how states collapse. Nigeria is not far off this possibility.

In Nigeria, recent political realities reveal a blind spot of pro-democracy advocacy: without the modulating effect of decentralization, sustained economic growth, a growing, secure middle class, and a literate, hopeful poor, liberal democracy can do and has done more damage than good. Liberal democracy has ironically become both an incubator and protector of mediocrity, corruption, and bad governance. The overarching casualty has been Nigeria’s very stability.

#### Nigerian instability escalates to global great power war

Charles A. Ray 21, Member of the Board of Trustees and Chair of the Africa Program at the Foreign Policy Research Institute, Former U.S. Ambassador to the Kingdom of Cambodia and the Republic of Zimbabwe, “Does Africa Matter to the United States?”, Foreign Policy Research Institute, 1/11/2021, https://www.fpri.org/article/2021/01/does-africa-matter-to-the-united-states/

Africa matters in terms of size, population, and rate of population growth. It is the continent currently most affected by climate change but is also a continent that can have a devastating impact on climate change globally because of the importance of the Congo Basin rainforest, which is the second-largest absorber of heat after the Amazon rainforest. The destruction of this important ecosystem could further accelerate global warming. As residents of the region come into increasing contact with the animals of the rainforest, this region could be the origin of the world’s next viral pandemic. Violent extremism and terrorism are increasing in Africa, and while now mostly localized, the danger has the potential to spread beyond the continent. Crises—natural and man-made—cause massive relocations of populations, both on the continent and abroad, which can have negative economic, social, and political impacts.

Why Africa Matters

The African continent is the world’s second-largest, with the second-fastest growth rate after Asia. With 54 sovereign countries, four territories, and two de facto independent states with little international recognition, the continent has a current population of 1.3 billion. By 2050, the continent’s population is predicted to rise to 2.4 billion. By 2100, Nigeria, Africa’s most populous country, will have a population of one billion, and half the world’s population growth will be in Africa by then.

The population of African countries is also overwhelmingly young. Approximately 40% of Africans are under 15, and, in some countries, over 50% is under 25. By 2050, two of every five children born in the world will be in Africa, and the continent’s population is expected to triple. These developments have positive and negative potential impacts on the United States and the rest of the world. Young Africans have, for the most part, completely skipped the analog age and gone directly digital. Comfortable with technology, they form a huge potential consumer and labor market. If, on the other hand, the countries of Africa fail to develop economically and do not create gainful employment for this young population, then there is the risk that they will become a huge potential source of recruits to extremist and terrorist movements, which currently target disadvantaged and disenchanted youth.

Lack of economic opportunity, increased urbanization, and climate-fueled disasters will also contribute to movement of people seeking better lives, which will impact economies and security not only on the continent of Africa, but also the economic and security situations around the world. Nations, lacking adequate critical infrastructure, education, and job opportunities are ripe for internal unrest and radicalization. In particular, inadequate health delivery systems, when coupled with natural disasters, such as droughts or floods that limit food production, cause famine and mass movements of populations.

The Challenges for U.S. Policy

Prior to World War II, the U.S. policy towards Africa was not as active as it was toward Europe, Asia, or Latin America. During the Cold War, Africa policy was primarily viewed from a perspective of super-power competition. The end of the Cold War and the rise of international terrorism introduced this as a major component in U.S. Africa policy along with competition with a rising China and increased Chinese engagement in Africa.

Before his first official trip to Kenya, U.S. President Barack Obama said, “Africa had become an idea more than an actual place . . . with the benefit of distance, we engaged Africa in a selective embrace.” This is probably an apt description of U.S. policy towards African nations despite the bipartisan nature of that policy. The United States, with the many domestic and international issues it has to cope with, can ill afford to continue to ignore Africa. Going forward, U.S. policy must include a hard-headed look at where Africa fits in policy priorities.

The incoming Biden administration will face a number of important issues and challenges as it develops its Africa policy. The most pressing issues are the following:

Climate Change: Climate change is an existential problem that affects the entire globe, but Africa has probably suffered more from the effects of climate change than other continents—and the problem will only get worse with time. In an October 2020 article, World Meteorological Organization (WMO) Secretary-General Petteri Taalas said,

Climate change is having a growing impact on the African continent, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement and stress on water resources. In recent months we have seen devastating floods, an invasion of desert locusts and now face the looming specter of drought because of a La Nina event. The human and economic toll has been aggravated by the COVID-19 pandemic.

Climate change impacts water quality and availability, and millions in Africa will likely face persistent increased water stress due to these impacts. A multi-year drought in parts of South Africa, for instance, threatened total water failure in several small towns and had livestock farmers facing financial ruin. Another pressing climate-change issue is the need for protection of the Congo Basin rainforest. This 178-million-hectare rainforest is the world’s second largest after the Amazon and is currently threatened by agricultural activities in Cameroon, Central African Republic, Democratic Republic of Congo, Republic of the Congo, Equatorial Guinea, and Gabon. Countries in the Congo Basin need to address the preservation issue, while also enabling sustainable agricultural activities to ensure food security for the region’s population. In addition to the impact on global climate caused by destruction of the rainforest, such destruction also brings human populations into closer contact with the region’s animals, creating the risk of future animal-to-human transmission of new and possibly more virulent viruses similar to COVID-19, which will have a global impact. In a January 2021 CNN report, Dr. Jean-Jacques Muyembe Tamfum, who as a researcher helped discover the Ebola virus in 1976, warned of possible new pathogens that could be as infectious as COVID-19 and as virulent as Ebola.

Rule of Law/Mitigation of Corruption: A key to African development, given the increasing urbanization, population increases, and youthfulness of the continent’s population, will be an increase in domestic and international investment to build the industries that can provide meaningful employment and improved standards of living. In order for this to be successful, African nations will need to address the issues of rule of law and corruption. Investors will not risk money if the business climate comes with a level of political risk that is too high. Government leaders throughout Africa need to establish legislation that provides an acceptable level of security for investments and take action to curb the endemic corruption that currently discourages investment. Corruption in Africa ranges from wholesale political corruption on the scale of General Sani Abachi’s looting of $3-5 billion of state money during his five years as Nigeria’s military ruler to the bribes paid by businessmen to police and customs officials. The “tradition” of having to pay bribes, or “sweeteners,” drives away domestic investment and scares away foreign investment, leaving many countries mired in poverty.

Violent Extremism and Terrorism: A number of African nations are currently plagued with rising extremist movements. While primarily a domestic issue, the mass movement of people fleeing violence and the disruption of economic activity have the potential to negatively impact the rest of the world. African nations need regional responses to curb extremist and terrorist organizations, many of which are supported by international terrorist organizations, such as ISIS and al Qaeda. In addition, the underlying conditions that helped to create these movements must be addressed. Terrorist groups in Africa range from relatively large and dangerous groups, such as Boko Haram, a group in Nigeria that has received support from al Qaeda and that aims to implement sharia law in the country; Al-Shabab, an al Qaeda affiliate aiming to overthrow the government in Somalia and to punish neighboring countries for their support of the Somali regime; and Uganda’s Lord’s Resistance Army, a fundamentalist Christian group. Terrorist groups in the fragile political climate of Libya also pose a threat to sub-Saharan Africa.

Great Power Competition: As the world’s second-largest economy, and with its increasing participation in international activities, China will continue to be a factor in Africa for the foreseeable future. This, however, is more a problem for the nations of Africa than it is for the rest of the world. The West can compete best by outperforming China in areas of strength by providing those goods and services that are unquestionably superior, and let African governments decide how to deal with China and its often-predatory lending practices and the Chinese tendency to import Chinese workers for its projects and investments rather than hiring locals. At the same time, Russia, which did not completely turn away from Africa at the end of the Cold War as many in the West sometimes believe, must still be considered a significant factor on the African landscape. In an effort to compensate for Western sanctions and to counter U.S. and Western influence, Russia is once again increasing its presence on the continent. Russian mercenaries, in exchange for diamond mining rights, have trained military forces in the Central African Republic, raising concerns about human rights abuses. Of particular concern is the presence of the Wagner Group, a private military company associated with Yevgeny Progozhin, a Russian oligarch with close ties to Vladimir Putin, who was indicted in the United States for trying to disrupt the 2016 U.S. elections. To date, Russia has, in addition to seeking basing rights, signed military cooperation agreements with 28 African nations. Russian activity is a combination of military and commercial, with Progozhin at the center of both. From 2010 to 2018, Russia nearly tripled its trade with African countries. While the activities of both Russia and China in Africa are of concern, and should be closely monitored, neither is of critical importance to U.S. national security.

With climate change, disease outbreaks, famine, extremism, and inter-ethnic violence, Africa will still experience crises in the foreseeable future that will be beyond the capacity of most nations on the continent to deal with. Climate change is probably the greatest cause of humanitarian crises in Africa, but mainstream media outside the continent either fail to notice or under-report them. Some of the crises, like Ebola or the next viral infection, can impact the rest of the world. These crises will cause starvation, mass movement of people, and increase internal and regional instability. Africa matters to the United States and the rest of the world. Its impacts can be felt far beyond the continent’s borders, but if approached as a partner rather than as a patron—with a focus on assisting African nations to improve governance, build critical infrastructure, boost domestic economies, and provide essential services to all—then Africa can be a positive contributor on the global stage.

#### Democracy makes disease control impossible

Zhifa Zhou 21, Associate Professor at the Institute of African Studies at Zhejiang Normal University and Pan Qu, Postgraduate at the Institute of African Studies at Zhejiang Normal University, “The Root Cause of the Failure of American COVID-19 Governance Based on the Criticism of Liberal Democracy From Error-Tolerant Democracy”, Philosophy Study, Volume 11, Number 7, July 2021, https://www.davidpublisher.com/Public/uploads/Contribute/60ff9cfb4589c.pdf

Introduction

Whether liberal democracy contributed to the COVID-19 governance was a hot topic in 2020 (“Democracy and Rise of Authoritarianism in COVID-19 World”, 2020). At the end of January, 2020, when COVID-19 witnessed the lockdown of Wuhan City, the West generally agreed that China lacked freedom of speech and the inertia of a rigid bureaucratic structure, and the national censorship system kept the whistle blower Dr. Wenliang Li silent, which led to the disease out of control (Mérieau, 2020). Democracies’ confidence mainly came from Amartya Sen’s research on the famine. Sen (1999) has claimed that no substantial famine has ever occurred in any independent and democratic country with a relatively free press and there is no exception to this rule. Citizens in democracies can expect governments to be more candid, transparent, and responsible in dealing with all kinds of crises, which authoritarian countries usually cannot (Berengaut, 2020; Bollyky & Kickbusch, 2020). So Steve Bloomfield (2020) has regarded that if China had a free press and transparent government, the pandemic could be brought under control before the outbreak. In conclusion, freedom plus democracy equals the COVID-19 antidote according to Western standards, although Wilson and Wisongye have found that social media rumors can exploit the right to freedom of speech and erode people’s health benefits (New York Times, 2021; Bollyky & Kickbusch, 2020). However, since March, 2020, with Western democracies seriously affected by COVID-19, their superiority of the political system has begun to expose its untrue and fatal defects. Especially when Wuhan began to lift its blockade on April 8, 2020 (People.cn, 2020), scholars and journalists began to question whether democracies had the ability to deal with the crisis better than China (Mérieau, 2020). Liberal democracy in the United States has not proved that it is more conducive to the COVID-19 governance than authoritarianism since 2020. From a global perspective, not only do most democracies fail to contain the spread of COVID-19, but almost all of the 10 most affected countries are liberal democracies (Coronavirus Resource Center, 2021). Their policy responses have a poor effect in reducing the death toll in early stages of the crisis, as shown that democratic political institutions may be at a disadvantage in responding quickly to COVID-19 (Cepaluni, Dorsch, & Branyiczki, 2020). More surprising is that the COVID-19 pandemic is so serious in the United States, yet no government officials have been removed from office because of their inactivity in fighting against the corona-virus. People doubt whether American accountability mechanism is still working. However, two impeachments against President Trump indicate that it seems to function quite well (Valenta & Valenta, 2017; Herb, Raju, Fox, & Mattingly, 2021). The direct loss to the United States caused by Russiagate and incitement of insurrection is far less than the pain caused by the failure of the COVID-19 governance, but no any official in the United States is responsible for it. If it again faces infectious diseases similar to COVID-19, will it repeat this unprecedented tragedy? Can liberal democracy and the separation and balance of powers push American president to act more aggressively? Error-tolerantism explains that the fundamental reason for the failure of American COVID-19 governance is a serious misunderstanding of the concept of freedom (Zhou, 2018; 2019; Zhou, Tan, & Liu, 2020). Liberalism has witnessed a rare scene: In the context of COVID-19, the president, governors, magistrates, and the public (Emery, Schwebke, & Park, 2020; Sullum, 2020; Behrmann, 2020; Kenton, 2020; Strano, 2020) have severe misunderstanding of freedom that cost more than American 600,000 lives (Coronavirus Resource Center, 2021).

In response to the above phenomenon, error-tolerantism as the development of liberalism defines liberty from a new perspective and shows a stronger explanatory power than liberalism (Zhou et al., 2020). The right paradigm of error-tolerantism, the right to be wrong (right to trial and error) as an original right and mutual empowerment theory, instead of natural rights theory and social contract theory, divides liberty into the right to liberty in innovative fields, right to be wrong as an original right, and the right to be right in non-innovative fields as sub-rights. The lockdown of Wuhan means that Chinese government has excised the power to be wrong as an original power, but the West criticized it with the right to liberty at the level of sub-rights, which is the first error in understanding liberty during American COVID-19 governance; after Wuhan effectively controlled COVID-19, its governance has transformed from an innovative field to a non-innovative one. Then, liberties in non-innovative fields as the sub-rights level, such as wearing face masks, keeping social distancing, showing health codes, are formed definitely (Zhou et al., 2020). However, wearing masks has been regarded as a sign of political oppression rather than a simple hygienic measure by the United States (Kahanel, 2021). Since liberalism has a major misunderstanding of the concept of liberty, liberal democracy based on the philosophy of liberalism should be deeply reflected or even reconstructed, and it is very reasonable for error-tolerant democracy constructed based on error-tolerantism to explore the defects of liberal democracy in American COVID-19 governance. Therefore, we first review scholars’ relevant research on American democracy and the COVID-19 governance, and then based on the theory of error-tolerant democracy, discuss the defects of liberal democracy and American political system that are unable to cope with the crisis of the century.

#### Future pandemics are inevitable---extinction

Dr. Matt Boyd 21, Research Director at Adapt Research Ltd, PhD in Philosophy of Evolution & Cognition from the Victoria University of Wellington, BA from Massey University, and Nick Wilson, Research Professor in the Department of Public Health at the University of Otago, “Optimizing Island Refuges Against global Catastrophic and Existential Biological Threats: Priorities and Preparations”, Risk Analysis: An International Journal, Wiley Online Library

1 INTRODUCTION

Our world is vulnerable to global catastrophic risks (GCRs) or existential risks (Bostrom, 2019; Ord, 2020). GCRs are so disastrous because they affect one or more systems critical to humanity, and spread to affect the entire planet (Avin et al., 2018). Existential risks threaten to eliminate humanity or permanently curtail its potential (Ord, 2020). Some of these risks are natural, for example asteroid or comet impact, supervolcanic eruption, naturally occurring pandemic, or various cosmic events (Bostrom & Cirkovic, 2008; Ord, 2020). Many others are the result of human activities, for example nuclear war, anthropogenic climate change, nonaligned artificial intelligence, engineered biological threats, geoengineering, or inescapable totalitarianism (Bostrom & Cirkovic, 2008; Ord, 2020).

There are three phases to an existential catastrophe: origin, scale up, and reaching every last human (Cotton-Barratt, Daniel, & Sandberg, 2020). Following any near miss, there would be a period where recovery of humanity's long-term potential may or may not be realized (Baum et al., 2019). Failure to anticipate or mitigate these threats risks undesirable trajectories for human civilization (Baum et al., 2019).

In addition to the present generation's obvious self-interest in continuing to exist, the perspective of long-termism suggests that humanity ought to mitigate these risks due to the potential immense value of future human generations (Beckstead, 2013), a desire to see aspects of the human project continue across time and perhaps the universe (Bostrom, 2003; Scheffler, 2013), and the potential cosmic significance of preserving intelligent life on Earth (Ord, 2020). A number of philosophical defenses of long-termism have been published (Beckstead, 2013; Greaves & MacAskill, 2019). Importantly, these long-term outcomes are largely under human control because most of the risk is probably anthropogenic (Beard & Torres, 2020; Ord, 2020).

1.1 Mitigating Existential Threats

It is too simplistic to think of existential risks as mere causes that are followed by a sequence of effects. We should think of risks as the product of hazards, vulnerabilities, and exposures (Liu, Lauta, & Maas, 2018). Hazards are the precipitating cause of a catastrophe, vulnerabilities are the inability of critical systems to withstand hazards, and exposures are the features of human society that turn this system damage into harm to populations (Beard & Torres, 2020). Mitigation of existential threats involves preventing their emergence, responding if the threat spreads, and building resilience so the threat does not lead to the death of every last human or leave humanity with permanently curtailed prospects (Cotton-Barratt et al., 2020). After a threat has passed, there may also be a series of limiters that might prevent the reemergence of a flourishing humanity (Baum et al., 2019). One such limiting factor could be the loss of technological society and know-how.

In order to achieve immunity from existential threat, humanity will need a period where it preserves its potential and protects itself from risks (Ord, 2020). Various methods have been proposed to address vulnerabilities and hence shift the probability of existential risk. These suggestions include: improved international focus, governance, and cooperation such as through the United Nations (Boyd & Wilson, 2020), imitating existing frameworks such as the Sendai framework for disaster risk reduction (Avin et al., 2018), achieving the United Nations Sustainable Development Goals (Cernev & Fenner, 2020), or extreme surveillance for threats (Bostrom, 2019). Toby Ord lists 38 specific measures across eight existential threats, and an additional 12 avenues to explore that address risks in general terms (Ord, 2020).

1.2 Biological Threats

Pandemic viruses with high case fatality could potentially infect a majority of the population. Deliberate biological events (DBEs) have occurred before (Millet & Snyder-Beattie, 2017a), will likely occur again, and could pose a threat to humans as great as nuclear war (Kosal, 2020). New technologies such as artificial intelligence could amplify biothreats in a number of ways (O'Brien & Nelson, 2020). These risks are increased because the Biological Weapons Convention (BWC) has no verification system (Dando, 2016), and has been violated in the past (Gronvall, 2018). It would only take one unanticipated or accidental event for a bioweapon (or laboratory accident) to become a catastrophic threat. The U.S. National Academies of Sciences specifically warns against synthetic biology and xenobiology (Gomez-Tatay & Hernandez-Andreu, 2019) and it is argued that a state-sponsored bioweapon attack is the greatest current threat (Sandberg & Nelson, 2020). See the Supporting Information for further details on biological threats. Global preparedness through the One Health approach, global health security projects, and the need to integrate health and the GCR field (Millet & Snyder-Beattie, 2017b) are important. But as the COVID-19 pandemic has shown, there may be important overlooked aspects or misunderstood risks that could make any suite of general preparation inadequate. Therefore, last lines of defense may be required, such as refuges.

#### Existential warming is inevitable AND causes a collapse into extreme authoritarianism---only transitioning from democracy solves

Dr. Chien-Yi Lu 21, PhD and MA in Government from the University of Texas, Austin, Visiting Scholar at Harvard University, Associate Research Fellow at the Institute of European and American Studies of Academia Sinica, Surviving Democracy: Mitigating Climate Change in a Neoliberalized World, Paperback Edition, 12/13/2021, p. 1-2

The fact that the scientific knowledge on the human contribution to climate change entered human society through the most advanced democratic societies should have been a cause for celebration. Given the congruence of climate mitigation and public interests, the problem of climate change should have been considered solved decades ago. Several decades of inaction later, however, arguments are proliferating that democracy is exactly the reason for inaction.

In The Collapse of Western Civilization, historians Naomi Oreskes and Erik Conway travel to the future to look back and offer a forensic analysis on the climate-induced Great Collapse of Western Civilization of 2074 (2014: 63). The future historians’ forensic report states that “[a]s the devastating effects of the Great Collapse began to appear, the nation-states with democratic governments… were at first unwilling and then unable” to deal with the crisis. These democratic governments realized that they had no “infrastructure and organizational ability to quarantine and relocate people” as “food shortages and disease outbreaks spread and sea level[s] rose.” In China, where there was centralized government, the crisis was handled much more adequately, leading to survival rates exceeding 80%, a development that “vindicated the necessity of centralized government” (2014: 51–2). The gist of The Collapse of Western Civilization is not about critiquing democracy per se but a warning against the stubborn inaction mandated by market fundamentalism that has hijacked Western democracies.1 In their previous book, Merchants of Doubt, Oreskes and Conway documented the way that climate deniers sowed the seeds of doubt about climate change and successfully staved off implementations of mitigation measures. For the authors, the anticommunist ideology that had kept actors vigilant about government encroachment in the marketplace occupied a central place in climate denial (2014: 69). Ironically, this sort of ideology-informed calculation meant that preventative action was blocked, increasing the risk that disruptive climate disasters would eventually necessitate the suspension of democracy and legitimating the sort of heavy-handed authoritarian interventions that the conservatives most abhorred (2014: 52; 69).

An appeal to suspend democracy for the sake of survival can be found in The Climate Change Challenge and the Failure of Democracy, where Shearman and Smith argue that liberal democracy is incompatible with the urgent necessity to prevent catastrophic climate change. The vested interests of politicians, corporations, and media lie in continuing with business as usual and in keeping the public ignorant. Instead of bottom-up reforms to improve democracy and bring about sensible climate policies, Shearman and Smith see a transformation into authoritarian regimes as the only responsible way forward when faced with the extreme ecological stress of climate change. They point out that, as Plato foresaw, those in power in a democracy are seldom able to resist the demands of the populace for long, but as a mass, the populace is seldom able to focus on complex problems and to perceive threats that lie over the horizon. Hence, those able to see further—scientists, experts, and the knowledgeable— should be entrusted with steering the course while there is still time to avoid disaster. It is only under a benign authoritarian rule of the knowledgeable that a saner, fairer, and more rational means of weighing social goods against evils can be introduced (Shearman and Smith, 2007).

#### The public is an idiocracy. ‘Pressure’ cannot be productive.

Dr. Stuart Parker 20, Philosopher and Former Teacher who Lectured on Philosophy and Education at London's Institute of Education, South Bank University, Author of Reflective Teaching in the Postmodern World, “The Problem With Democracy — It's You”, The Article, 10/5/2020, https://www.thearticle.com/the-problem-with-democracy-its-you

So why is our democracy so unfit for purpose? Why is it that we can elect leaders who are little more than self-serving schemers, whose contempt for the electorate renders them incapable of giving straight, honest answers to even the most straightforward, reasonable questions? It’s not as if any of these qualities have been smuggled in under our noses. They are paraded before our eyes every single day. Nobody voting for Johnson or Trump could ~~be blind to the fact~~ [ignore] that they are serial liars. And yet they voted all the same. Why?

\*\*\*

Mencken was on to something when suggesting that the leaders we get, the leaders we deserve, closely represent something dark in the inner soul of the people. There’s no easy way to put this — the problem with democracy is the voters. The voters simply aren’t good enough to support a healthy democracy. They’re not up to the job. Now I know some will think: a snowflake-remainer-lefty-loser will always blame the voters just as a bad workman always blames his tools. But these tools are shot.

Consider this: a poll in 2005 found that 21 per cent of Americans believe in witches and 9 per cent that spirits can take control of a person. In 1999, 18 per cent believed the sun revolves around the earth — so much for “the science” — and in 2000, 31 per cent believed in ghosts, and increase of 20 percentage points since 1978.

By 2019, the year before Trump’s re-election attempt, significant numbers believed in the illuminati, Big-foot and a flat earth. Ghost-belief had risen to 45 per cent, as had the belief in demons. Belief in vampires stood at a fangtastic 13 per cent.

Britain has nothing to be proud of. While 33 per cent of us believe in ghosts and 18 per cent in demonic possession, a whopping 52 per cent of us believe that you can magically make a false claim true simply by writing it on the side of a bus.

In elective dictatorships where small margins have huge consequences we’d better get used to the fact that (possibly small) groups with stupid ideas and a lack of relevant knowledge and skills can have a disproportionate effect on the lives of the rest of us.

### War – Democracy – 2NC

#### This is true in all scenarios, including against other democracies

Dr. Daina Chiba 21, Associate Professor of Political Science in the Department of Government and Public Administration at the University of Macau, Ph.D. in Political Science from Rice University, LL.M in Jurisprudence and International Relations from Hitotsubashi University, and Dr. Erik Gartzke, Professor of Political Science at the University of California, San Diego, PhD in Political Science from the University of Iowa, “Make Two Democracies and Call Me in the Morning: Endogenous Regime Type and the Democratic Peace”, 2/19/2021, https://dainachiba.github.io/research/make2dem/Make2Dem.pdf

We now turn to the results from the outcome stage, where militarized conflict initiation is regressed on democracy measures and other covariates. The univariate clog-log model 32 that ignores the endogeneity, shown in column (1) in Table 1, successfully replicates the standard, dyadic democratic peace finding that democracies are peaceful, though only toward other democracies. Note that, while individual democracy measures have either a positive or insignificant coefficient, joint democracy has a negative coefficient that overwhelms the positive coefficients of individual democracy measures in the univariate model. As a result, the univariate model produces a result that, while democracy may increase conflict against a non-democracy, it decreases conflict against a democracy.

To illustrate this, we calculate the average treatment effect of joint democracy for the challenger and for the target based on the univariate model. These effects are calculated by comparing the predicted probabilities of conflict initiation when changing the regime type of self (challenger or target) from non-democracy to democracy, holding constant the regime type of the other (target or challenger) as democracy. 33 Gray, hollow circles in Figure 4 show the treatment effects of challenger’s and target’s democracy. We can see that both effects are negative and statistically significant at the 95% confidence level.

Once we correct the endogeneity, however, the data no longer support such conclusions. In column (2) in Table 1, the negative coefficient for joint democracy no longer overwhelms the positive coefficient of challenger’s democracy. Challenger’s democracy now appears to increase conflict even against a democratic target. Red, solid circles in Figure 4 show the average treatment effects of challenger’s and target’s democracy, calculated from the trivariate model. The effect is positive and statistically significant for challenger’s democracy, although the effect is indistinguishable from zero for target’s democracy.

Whether we correct for endogeneity thus makes a significant difference in our estimates of the effect of joint democracy on conflict. The key to understanding why these changes occur lies in the estimated correlations between the error terms for different equations. The estimated error correlation between equations for conflict and challenger’s democracy, 12, is negative and statistically significant. This suggests that unobservable or unmeasured determinants of a country’s democracy make it less likely for that country to attack another country. A failure to control for such factors would generate a negative omitted variable bias, making it look as if challenger’s democracy has a pacifying effect on conflict behavior. On the other hand, the estimated error correlation between conflict and target’s democracy equations, 13, is indistinguishable from zero, suggesting that the endogeneity problem does not seem to operate for target’s regime type.

#### It's an empirical question, answered by statistical methods---failing to code based on exogenous variables corrupts their evidence

Dr. Daina Chiba 21, Associate Professor of Political Science in the Department of Government and Public Administration at the University of Macau, Ph.D. in Political Science from Rice University, LL.M in Jurisprudence and International Relations from Hitotsubashi University, and Dr. Erik Gartzke, Professor of Political Science at the University of California, San Diego, PhD in Political Science from the University of Iowa, “Make Two Democracies and Call Me in the Morning: Endogenous Regime Type and the Democratic Peace”, 2/19/2021, https://dainachiba.github.io/research/make2dem/Make2Dem.pdf

Before we review our approach in detail, it may be useful to explain why this type of analysis has not been pursued successfully in the past and what makes our effort different from other, broadly related projects. We are not the first to apply an IV framework (more specifically) or multi-equation models (more broadly) to the democratic peace. However, previous attempts suffer from two major problems. First, previous studies have typically used a dyad (country pair) as the unit of observation in analyzing conflict, which requires some summary measure(s) of democracy for a pair of countries rather than the state-level (monadic) democracy measure. 6 Use of a dyadic aggregate to represent regime type creates a discrepancy between the first stage regression (predicting democracy at the country level) and the outcome stage regression (predicting conflict at the dyad level). 7 We avoid this problem by using the directed dyad as the unit of observation in predicting conflict, distinguishing between the potential challenger and target in a dispute. This allows us to connect the first stage equations (predicting the challenger’s and target’s regime types) and the outcome stage equation seamlessly. Doing so has several benefits: the outcome stage model could directly include country-level covariates (such as challenger’s and target’s democracy) without having to convert them to a dyadic summary. This also allows us to estimate the system of equations jointly rather than relying on the “forbidden regression.” 8

Second, a more daunting challenge in applying an IV approach to democratic peace research is the difficulty of finding a plausible instrument for regime type — a variable that is strongly correlated with regime type but is unrelated to war. This is the challenge that has plagued empirical researchers in many fields. For example, a recent study of the effect of regime type on economic growth uses a diffusion-based measure of democracy (i.e., average value of democracies in a given region) as an instrument for democracy (Acemoglu et al. 2019). However, diffusion-based instruments such as this are unlikely to be a valid instrument, due to spatial spill-over, interdependence, and, most importantly, simultaneity (Betz, Cook, and Hollenbach 2018). Recognizing problems with spatial instruments, McDonald (2015) seeks to exploit the very discrepancy between country-level and dyad-level designs as the source of identification. His discussion, however, lacks a clear explanation as to why some determinants of regime type do not influence conflict. 9

We turn to a demographic variable — average female fertility rate in a given country — as a source of variation in regime type that is exogenous to international conflict. As we will argue below, a lower fertility rate is a strong driver of democratization. We will also present theoretical arguments and a series of falsification tests that support the claim that average national fertility rate does not directly influence international conflict.

### Transition Wars – Democracy – 2NC

#### The move to democracy doubles the risk of quick conflict AND goes nuclear

Dr. Edward Mansfield 22, Hum Rosen Professor of Political Science and Director of the Christopher H. Browne Center for International Politics at the University of Pennsylvania, B.A., M.A., and Ph.D. from the University of Pennsylvania, and Dr. Jack Snyder, Robert and Renee Belfer Professor of International Relations in the Political Science Department and the Saltzman Institute of War and Peace Studies at Columbia University, Ph.D. in Political Science from Columbia University, BA in Government from Harvard University, Conflict After the Cold War: Arguments on Causes of War and Peace, Sixth Edition, Ed. Betts, p. 331-332

DANGERS OF TRANSITION

The idea that democracies never fight wars against each other has become an axiom for many scholars. It is, as one scholar puts it, “as close as anything we have to an empirical law in international relations.” This “law” is invoked by American statesmen to justify a foreign policy that encourages democratization abroad. In his 1994 State of the Union address, President Clinton asserted that no two democracies had ever gone to war with each other, thus explaining why promoting democracy abroad was a pillar of his foreign policy.

It is probably true that a world in which more countries were mature, stable democracies would be safer and preferable for the United States. But countries do not become mature democracies overnight. They usually go through a rocky transition, where mass politics mixes with authoritarian elite politics in a volatile way. Statistical evidence covering the past two centuries shows that in this transitional phase of democratization, countries become more aggressive and war-prone, not less, and they do fight wars with democratic states. In fact, formerly authoritarian states where democratic participation is on the rise are more likely to fight wars than are stable democracies or autocracies. States that make the biggest leap, from total autocracy to extensive mass democracy—like contemporary Russia—are about twice as likely to fight wars in the decade after democratization as are states that remain autocracies.

This historical pattern of democratization, belligerent nationalism, and war is already emerging in some of today’s new or partial democracies, especially some formerly communist states. Two pairs of states—Serbia and Croatia, and Armenia and Azerbaijan—have found themselves at war while experimenting with varying degrees of electoral democracy. The electorate of Russia’s partial democracy cast nearly a quarter of its votes for the party of radical nationalist Vladimir Zhirinovsky. Even mainstream Russian politicians have adopted an imperial tone in their dealings with neighboring former Soviet republics, and military force has been used ruthlessly in Chechnya.

The following evidence should raise questions about the Clinton administration’s policy of promoting peace by promoting democratization. The expectation that the spread of democracy will probably contribute to peace in the long run, once new democracies mature, provides little comfort to those who might face a heightened risk of war in the short run. Pushing nuclear-armed great powers like Russia or China toward democratization is like spinning a roulette wheel: many of the outcomes are undesirable. Of course, in most cases the initial steps on the road to democratization will not be produced by any conscious policy of the United States. The roulette wheel is already spinning for Russia and perhaps will be soon for China. Washington and the international community need to think not so much about encouraging or discouraging democratization as about helping to smooth the transition in ways that minimize its risks.

## Solvency

### Defense – 1NC

#### Developing trust in AI is impossible---black box problem means true integration is impossible

Erik Lin-Greenberg 20, postdoctoral fellow at the University of Pennsylvania’s Perry World House. Texas National Security Review, Vol 3, Iss 2. Spring. "Allies and Artificial Intelligence: Obstacles to Operations and Decision-Making" <https://tnsr.org/2020/03/allies-and-artificial-intelligence-obstacles-to-operations-and-decision-making/> //pipk

AI can also strain alliance decision-making by fueling uncertainty about information and military actions. Unlike human analysts or military personnel who can be asked to explain and justify their findings or decisions, AI generally operates in a “black box.” 97 The neural networks that underpin many cutting-edge AI systems are opaque and offer little insight into how they arrive at their conclusions.98 These networks rely on deep learning, a process that passes information from large data sets through a hierarchy of digital nodes that analyze data inputs and make predictions using mathematical rules. As data flows through the neural network, the net makes internal adjustments to refine the quality of outputs. Researchers are often unable to explain how neural nets make these internal adjustments. Because of this lack of “explainability,” users of AI systems may have difficulty understanding failures and correcting errors.99

Policymakers have called for the development of more transparent AI systems, and researchers are working to develop explainable AI tools that peer inside the AI black box.100 Yet, many decision-makers remain uncomfortable with the uncertainty surrounding AI-enabled systems. The commander of the U.S. Air Force’s Air Combat Command, for instance, publicly explained that he was not yet willing to rely on AI programs to analyze the full-motion video collected by reconnaissance drones. He argued that although systems are improving, they are still unable to consistently provide accurate analysis.101 So long as the decisions and analysis of AI systems remain opaque, military commanders may be reluctant to trust AI-enabled systems. And if used, AI may contribute to the fog of war, rather than reduce it, making it difficult to make decisions using information delivered by AI technologies.

The operational implications associated with uncertainty and lack of trust in AI would likely be exacerbated in multinational alliance contexts. There is significant cross-national variation in trust in AI technologies, even among close allies. One 2018 survey, for instance, found that just 13 percent of respondents in Japan and 17 percent of respondents in South Korea trust artificial intelligence, compared to 25 percent of respondents in the United States. Similar disparities exist between the United States and many of its NATO allies. In Spain, 34 percent of respondents trust artificial intelligence, compared to 21 percent in Canada, 40 percent in Poland, and 43 percent in Turkey.102 Given this variation, policymakers and commanders from some states may be more reluctant to use AI-enabled systems or trust the information they deliver than leaders from other states during multinational operations.

Allied decision-makers will also face uncertainty when confronting a rival’s use of AI-enabled technologies. Leaders will be forced to wrestle with whether to respond to actions carried out by AI-enabled systems — like autonomous aircraft or ships — in the same way as actions carried out by traditionally manned assets. Existing doctrine and law are generally silent on these issues, providing no guidance on the appropriate response. States have drafted domestic policies to govern their own use of autonomous weapon systems, but these regulations and international law make no distinction between how states should react to a rival’s AI-enabled military actions versus “traditional” military actions.103 Yet, decision-makers may believe that a rival’s use of AI technologies demands different responses than those involving manned platforms.104 What happens if a rival claims that an attack carried out by an AI-enabled system was the result of a flawed algorithm? Should air defense forces respond differently to an adversary’s autonomous drones that penetrate friendly airspace than to a manned aircraft that does the same? Decision-makers may find themselves with little time to consider these complicated issues, particularly as AI technology accelerates the speed of a rival’s military operations.

#### Data sharing is too hard---integration is impossible

Erik Lin-Greenberg 20, postdoctoral fellow at the University of Pennsylvania’s Perry World House. Texas National Security Review, Vol 3, Iss 2. Spring. "Allies and Artificial Intelligence: Obstacles to Operations and Decision-Making" <https://tnsr.org/2020/03/allies-and-artificial-intelligence-obstacles-to-operations-and-decision-making/> //pipk

Data Sharing and Standardization

As the number of states that employ military AI applications grows, the ability of allies to operate collectively will depend, in part, on the sharing of data that fuels AI systems. AI requires massive amounts of data to train and feed algorithms and models. To identify a surface-to-air missile site, for instance, an AI image classifier must learn to differentiate missile sites from other facilities by studying images of known missile sites. The more data used to train these systems, the more accurate the system will be.66 Once fielded, AI-enabled systems like the image classifier must continue to be fed imagery from reconnaissance aircraft, satellites, or other assets in a format that allows for target identification. Shared data might be needed to enhance the accuracy of AI-enabled systems or to increase the effectiveness of multinational operations. For example, some member states may be better positioned than others to gather data on a shared rival, increasing the amount of data available to AI systems.67

Because of its central role in AI development and operations, the U.S. military has described data as a “strategic asset,” yet sharing data — even within the U.S. military — has posed a significant challenge.68 Lt. Gen. Jack Shanahan, founding director of the Department of Defense’s Joint Artificial Intelligence Center, lamented that data “has stymied most of the [military] services when they dive into AI.” Specifically, “they realize how hard it is to get the right data to the right place, get it cleaned up, and train algorithms on it.”69 There are two primary factors that underlie these challenges. First, data resides in thousands of different repositories and often lacks standardized formatting. Video from the U.S. military’s fleet of reconnaissance aircraft, for instance, is stored on multiple separate networks and in different data formats. Second, significant amounts of data collected by weapons and sensor systems are considered proprietary by the contractors that design and maintain the equipment. Firms must first release or “unlock” this data before it can be analyzed or fed into other systems.70

Although shared data is needed to develop AI technologies that can integrate with allied equipment, states face both political and technical barriers to sharing security sector information. From a political standpoint, even the closest allies may be hesitant to share the sensitive data that undergirds military AI systems. States fear that sharing sensitive data might reveal intelligence sources and methods, the revelation of which could compromise ongoing operations or strain political relationships. During the Vietnam War, for example, the United States was hesitant to share intelligence with its ally South Vietnam. Officials feared that communist sympathizers in the ranks of South Vietnam’s military and intelligence services would pass information to North Vietnam and the Vietcong. They were also concerned that intelligence might highlight that the United States was planning operations that did not align with South Vietnam’s government priorities.71 States also worry that shared information could be used for purposes other than initially intended or in ways that are at odds with the sharing state’s interests. Turkey, for instance, may have used intelligence shared as part of counter-Islamic State operations to instead target Kurdish forces in northern Syria.72

To minimize these perceived risks, states often impose restrictions on information sharing. One of the most common control measures is sharing only finished intelligence — products such as briefings or reports derived from a variety of different intelligence sources.73 These products provide assessments, but generally omit technical data — like details about the information source — that could reveal intelligence-gathering procedures and methods. Although data sharing is a type of intelligence sharing, developing and operating AI-enabled systems may require the exchange of more complete raw data in far larger quantities than traditional intelligence sharing. Raw data, which includes imagery files and signals intercepts, can include metadata such as spectral signatures of imagery or characteristics of electronic emissions that can be used to feed AI systems.74 Since this information can expose precise capabilities and shortcomings of a state’s intelligence systems, decision-makers may be hesitant to share it — especially in the large quantities needed to develop and run many AI-enabled systems.

There are also technical obstacles to data sharing. Just as the U.S. intelligence community and military stores information in nonstandardized formats on multiple systems, so too do national security institutions in other allied states. Across an alliance, the same type of data might reside on hundreds of different networks and in different formats, making it difficult to share data or to develop interoperable systems. To use data from other alliance partners, data must first be located, transferred out of a state’s classified computer network, and reformatted into a standardized, usable form. Given that the U.S. military has faced significant data management challenges in its own AI development, we should expect alliances — with their greater number of institutional actors and data sources — to encounter even greater obstacles to data sharing.

Vulnerabilities: AI and Data

In addition to barriers to sharing, allies face the possibility that the data that they do share may be especially vulnerable to adversary manipulation. Engineers and military leaders worry that rivals could hack into data repositories and “poison” data — inserting fake data or making existing data deliberately flawed.75 In one recent academic study, researchers used data poisoning to cause an algorithm designed to identify street signs to misclassify stop signs as speed limit signs.76 In the military domain, a rival could poison imagery data in order to throw off AI target recognition systems, leading the system to miss military targets, classify them as nonmilitary ones, or identify civilian infrastructure as military facilities. At best, this could require manpower-intensive efforts to secure and sanitize data or lead states to turn back to manual analysis of targets. At worst, this could lead to the inadvertent targeting of noncombatants.

While the risk of data poisoning plagues all AI users, alliance military operations may be particularly susceptible because data inputs from multiple states are used to train and operate AI-enabled systems across the alliance. Flawed data inputs from one state can therefore have cascading effects across an alliance’s operations. Rivals will recognize that different members of an alliance defend their networks and data with different levels of safeguards. As a result, rivals may target data stored by states where they have easier access.77

#### There’s not enough AI workers to solve---shortages means innovations won’t be effective

Stefano Costalli 21, Associate Professor of Political Science in the Department of Political and Social Sciences, University of Florence, Italy and Research Fellow of the Michael Nicholson Centre for Conflict and Cooperation, University of Essex. “NATO Decision-Making in the Age of Big Data and Artificial Intelligence” Editors: Sonia Lucarelli; Alessandro Marrone; and Francesco Niccolò Moro. Sonia Lucarelli is Professor of International Relations and European Security at the University of Bologna, and member of the Board of Directors of the Istituto Affari Internazionali (IAI). Alessandro Marrone is Head of the Defence Programme of IAI and teaches at the Istituto Superiore di Stato Maggiore Interforze (ISSMI) of the Italian Ministry of Defence. Francesco N. Moro is Associate Professor of Political Science at the University of Bologna and Adjunct Professor of International Relations at the Johns Hopkins University Europe Campus. This publication is the result of the Conference “NATO Decision-making: promises and perils of the Big Data age”, organized by NATO Allied Command Transformation (ACT), the University of Bologna and Istituto Affari Internazionali (IAI) of Rome. <https://www.iai.it/sites/default/files/978195445000.pdf> //pipk

A key requisite for all organizational innovations to occur and for Big Data analysis to be effective is the development and incorporation of a Big Data culture. Chief data officers and senior data-related leadership positions will acquire crucial importance in the analysis of information and in the actual decision-making process, but these positions require a special mix of talent and tools that are currently scarce in many large organizations, especially in the public sector. The organizations that are implementing big data analysis seem especially in need of ‘translators’ – professionals that can ensure effective communication between the Big Data analysis unit and other parts of the organization, where workers are not data scientist and may not be ready to work directly on complex models. However, organizations willing to use Big Data are also in need of real data scientists and analysts, because sophisticated techniques and data analysis tools eventually rely on talented humans who know how to manage the tools and interpret data. As a result, attracting new types of talented young workers and retaining them creating new career paths and opportunities will represent both an essential organizational innovation and an important challenge.

In fact, some members of the WG highlighted that it will not even be easy to find many workers with the appropriate knowledge and skills to perform the new tasks in old and complex organizations. It is possible to find computer scientists, but sometimes these individuals do not seem to fit well with large organizations whose main core business has not much to do with computer science. At the moment, it is even more difficult to find translators, since in principle these workers should be social scientists with an expertise in Big Data analysis, but most academic institutions are not ready to forge these profiles. For what concerns NATO and national armed forces, this educational task is not even performed by military academies, even though some experiments are emerging. The ideal profile would include technical awareness, quantitative analytical skills, broad vision, flexibility and open-mindedness – and this explains why it is not easy to produce it.

### 1NC – No Solvency – EU Say No

#### EU says no – 4 reasons – distrust of the US, desires for digital autonomy, lack of threat perception, and Brexit all short-circuit transatlantic cooperation

Franke 2021 – policy fellow at European Council on Foreign Relations

Ulrike Esther Franke January 2021 “Artificial Divide: How Europe And America Could Clash Over Ai” European Council on Foreign Relations

Obstacles to cooperation

Both sides of the Atlantic are already motivated to cooperate with each other on AI. But, despite these shared interests, transatlantic cooperation on AI may not be straightforward. Four trends, in particular, could pose problems: transatlantic estrangement; European digital autonomy efforts; differing views on China; and, potentially, Brexit.

Transatlantic estrangement

The transatlantic alliance has had a bad four years. The Trump administration’s criticism of the United Nations and the World Trade Organization, the president’s threats to leave NATO, and his active criticism of the EU all made Europeans wonder whether they had lost their most important partner. Moreover, in light of the conflict over 5G, in the minds of many Europeans, technology in particular has become an area that creates conflict in the transatlantic relationship rather than fostering cooperation.

Although transatlantic relations are likely to improve under Biden, substantial damage has been done, and it will take some time to mend these ties. But, even if relations improve, it is becoming increasingly obvious that US has a diminishing interest in Europe as a geopolitically important part of the world. This trend was already visible under Trump’s predecessor, Barack Obama. It is, therefore, unsurprising that, on technology cooperation, both sides emphasise the importance of working with other actors as well as each other. The US National Security Commission on AI, for example, recommends that the US Departments of State and Defense “should negotiate formal AI cooperation agreements with Australia, India, Japan, New Zealand, South Korea, and Vietnam”. Its March 2020 report emphasises on several occasions the importance of the Five Eyes intelligence alliance. Meanwhile, Europeans are pursuing the idea of an alliance for multilateralism. And, on technology and AI more specifically, they have also begun to reach out to other democratic allies.

European digital autonomy

The most important aspect of transatlantic estrangement, however, is not the loss of trust between the US and Europe – which they will eventually reverse. Rather, during the four years of the Trump administration, and partly in response to isolationist tendencies in the US, Europeans have become much more comfortable talking about European strategic autonomy or sovereignty. Without encouraging the narrative that these efforts are directed against the US, or were primarily an answer to Trump, Europeans aim to empower Europe as an actor in its own right. In the technological realm, this led to the idea of European digital sovereignty, the aim of which is to build up European technological capabilities. Although European digital sovereignty is not specifically targeted at the US, it has led, among other things, to efforts such as the possible regulation of American technology companies and concerns over American firms acquiring European start-ups. European campaigners and some policymakers believe US tech giants such as Google, Apple, Facebook, and Amazon are forces to protect against. European thinking on technology partly developed in opposition to the US and US companies. Thus, European efforts to build up digital sovereignty may impede transatlantic cooperation.

The EU’s effort to strengthen ethical AI, and to make ‘trustworthy AI’ a unique selling point for Europe, might also end up creating problems for transatlantic cooperation. Many EU policymakers believe that the EU’s insistence on ethical AI will eventually become a location advantage for Europe (much like data privacy): as more people become concerned about unethical AI and data security, they will prefer to use or buy AI ‘made in Europe’ rather than elsewhere. In this respect, two European aims are at odds with each other: on the one hand, Europeans want to ensure that AI is developed and used in an ethical way. Partnering with a powerful player such as the US on this matter should be an obvious way to help them achieve this goal. However, if the EU considers ethical AI not just a goal for humanity but a development that may also create commercial advantages for Europe, then transatlantic cooperation on this issue is counterproductive, as it would undermine Europe’s uniqueness.

Finally, many Europeans have expressed scepticism about the extent to which Europe and the US are indeed aligned on ethical AI principles. For example, the Danish national AI strategy argues for a common ethical and human-centred basis for AI. It describes ethical AI as a particularly European approach: “Europe and Denmark should not copy the US or China. Both countries are investing heavily in artificial intelligence, but with little regard for responsibility, ethical principles and privacy.” Many Europeans feel that the US “has no idea how to regulate” cyberspace and continues to show little enthusiasm for doing so. The EU, however, likes to think of itself as a trailblazer when it comes to digital rights, such as the 2014 “right to be forgotten” or the 2018 General Data Protection Regulation.

Differing views on China

As noted, only a few European states look at AI through a geopolitical lens, and EU efforts on this matter focus primarily on strengthening the EU as a global player. This means that the American interest in using transatlantic cooperation as a means to curb Chinese power is likely to have only limited traction in Europe. And US companies, rather than Chinese ones, currently remain the primary ‘other’ for Europe to measure itself against. European regulation efforts still concentrate on US companies rather than Chinese firms. In light of recent changes in language on China in both NATO and the EU, which describe the country as a “strategic competitor” and “systemic rival”, European and American views of China may converge eventually. But, at the moment, Europeans do not feel the same urgency as the US when it comes to pushing back against China. Unfortunately for those in the US who favour greater transatlantic cooperation, the European nation that most often thinks in geopolitical terms, France, is among those most sceptical of the US.

Brexit

Finally, the United Kingdom’s exit from the EU may further complicate transatlantic cooperation on AI. Even if the EU and the UK were to decide to work as closely as possible, the EU would no longer be able to speak as much of Europe as previously. Any transatlantic cooperation on AI will, therefore, require coordination between three, rather than two, actors. Given the UK’s strong technology and AI credentials (AI leader DeepMind is based in London, although it is now owned by Google’s parent company, Alphabet), the country is likely to want to play an important role in any future negotiations on AI standards and use.

### No Solvency – EU Says No – “Tech Sovereignty”

#### EU Says No – Wants to establish digital autonomy separate from the US

Franke 2021 – policy fellow at European Council on Foreign Relations

Ulrike Esther Franke January 2021 “Artificial Divide: How Europe And America Could Clash Over Ai” European Council on Foreign Relations

European policymakers have been less vocal about the geopolitical consequences of AI. So far, the debate in Europe has primarily revolved around AI’s economic and social effects. Of the 21 strategies on AI either published or drafted by EU member states, very few touch on the geopolitical implications of AI. The notable exception to this is France, whose national AI strategy was clearly drafted with a geopolitical mindset. It warns that France and Europe need to “avoid becoming just ‘digital colonies’ of the Chinese and American giants”. The strategy’s inclusion of “American giants” is telling and important. It shows that, from a European point of view, the US is the primary ‘other’ that Europe measures itself against on technology – at least for now. This is despite the fact that, in recent years, Chinese acquisitions of European high-tech firms have caused significant concern.

#### Tech sovereignty prevents cooperation

Konaev and Chahal 2021 – research fellow and research analys with the Center for Security and Emerging Technology

Margarita Konaev Husanjot Chahal April 2021 “The Path of Least Resistance: Multinational Collaboration on AI for Military Logistics and Sustainment” CSET Issue Brief

Another potential barrier to collaboration, particularly with European allies, is the growing momentum around the idea of European digital sovereignty and increasing concerns about continued dependence on U.S. technology companies.17 Part of the push for greater European technology independence stems from Europe being “caught in the crossfire” on a variety of technology issues, including 5G and internet regulation amid the intensifying strategic competition between the United States and China. European nations like France and Germany, among others, are becoming more assertive when it comes to control over their data.18 The experts behind France’s AI strategy, for instance, have advocated for a data policy that is “structured around the goals of sovereignty and strategic autonomy” as a prerequisite for the development of AI in France and in Europe, in an effort to “avoid becoming just ‘digital colonies’ of the Chinese and American giants.”19 Moreover, as Ulrike Franke explains, the EU has taken a stronger stance on protecting individuals’ digital rights through regulations such as the 2014 “right to be forgotten” and the 2018 General Data Protection Regulation.20 Differing views on China, a push toward additional regulations of U.S. technology companies, different approaches toward data privacy, and commercial competition can all hinder transatlantic cooperation on AI.

### No Solvency – EU Say No – Chilling Effect

#### EU tech protectionism creates a chilling effect on the industry – prevents research and development by dissuading start-up participation

Broadbent 2021 - senior adviser (non-resident) with the Scholl Chair in International Business at the Center for Strategic and International Studies in Washington, D.C.

Meredith Broadbent August 10, 2020 “Internet or Splinternet? The Consequences of European Tech Sovereignty” Center for Strategic and International Studies https://www.csis.org/analysis/internet-or-splinternet-consequences-european-tech-sovereignty

Sitting atop resounding commercial success in the domestic as well as the global marketplace, the CEOs of four U.S. digital behemoths appeared last week before the House of Representatives to respond to public and congressional concerns about market domination.¶ The size and success of these champions, under fire for lack of transparency and anticompetitive practices, have triggered similar, more exaggerated concerns in Europe, which are playing out in a frenzy of proposed rulemaking at both the Commission and member-state level. As Congress probes the market behavior of U.S. digital companies, it is important for U.S. legislators to consider parallel rising pressure for digital and industrial protectionism in Europe, particularly in Germany and France. This flurry of regulatory activity endangers transatlantic data transfers—the lifeblood of many innovative U.S. firms—and will hurt U.S. business success globally while simultaneously distracting both Europe and the United States from the broader threat posed by China’s authoritarian state capitalist system.¶ Many Europeans are deeply worried about the continent’s ability to compete long term in the global digital economy, given its challenges in developing competitors to the U.S. and Chinese tech giants. Yet European economies have tremendous strengths—highly educated workforces, depth in engineering, advanced technologies, and a leadership role in a host of industries that are rapidly digitizing, such as agriculture, infrastructure, transportation, logistics, manufacturing, and knowledge-intensive services, for example, financial, business, environmental, and engineering services. Constructing new European regulations for the digital era should be guided first by the do no harm warning.¶ The United States and Europe share an interest in piloting, investing in, and leveraging disruptive technologies like artificial intelligence (AI), blockchain, and the Internet of Things in these key industries, and liberalizing market access for services in emerging markets. The United States and Europe can also work together to ensure firms and workers in more underserved and remote regions are able to apply technologies, access educational and training opportunities, and increase productivity. But improved transatlantic cooperation in supporting innovation, productivity, consumer welfare, and sustainable job creation in a flourishing transatlantic digital economy, under an open and free internet architecture, seems all the more remote in light of where European regulators say they are headed.¶ The Commission released a series of documents earlier this year outlining Europe’s regulatory future, including a White Paper on Artificial Intelligence, a Communication on European Strategy for Data, and a framing paper related to Shaping Europe’s Digital Future. These documents and many more speak to the European desire to achieve “digital autonomy” and “tech sovereignty” through an array of regulatory and tax changes aimed at nurturing indigenous tech firms, developing independent European data pools, and tamping down on large, innovative foreign firms offering attractive digital services to European consumers.¶ Artificial Intelligence¶ Following the General Data Protection Regulation (GDPR) model of being the first mover with comprehensive regulation, the Commission is taking aggressive aim at being the preeminent “global standards setter” in AI. The European Union’s heavy-handed preliminary proposal for AI regulation diverges sharply from the U.S. approach. In its white paper on AI, the Commission has proposed ex ante conformity assessments to control access to the EU market for AI applications originating outside of the EU. That would likely require a new framework with criteria, benchmarks, and standards that European authorities will use to determine if an AI product is “trustworthy, secure and in respect of European values and rules” before it is allowed entry into the European market. This approach could include a pre-market review by EU authorities of algorithms, training data, documentation on programming, and how the system was built, as well as accuracy tests and other requirements. ¶ Also under consideration are data quality and traceability requirements that would require non-EU firms to train AI applications on GDPR compliant data, an extraterritorial regulation that seemingly would burden U.S. firms with requirements to completely retrain many proprietary algorithms developed in the United States with new data sets as a condition of market access in the European Union.¶ Unlike its inaction in the area of federal privacy regulation, which has allowed Europe to set a de facto global standard, the United States has led an international, cooperative effort through the G7 to reach common standards in the challenging area of AI research and development. A coordinated interagency team in the United States focused on AI regulation and emerging issues makes transatlantic collaboration is this new regulatory space a possibility.¶ New Activist Competition Measures¶ In a February 4, 2020, letter to Commission Executive Vice-President Vestager calling for more activist competition policy, France, Germany, Poland, and Italy describe their two overarching goals: (1) moderating competition emanating from “state-backed and subsidized” foreign competitors (e.g., China); and (2) controlling “emergence of large players in the digital economy relying on the accumulation of data and unparalleled network effects resulting in . . . excessive market power.” (e.g., large U.S. and Chinese tech companies.) The four European governments advocate for policies to tackle the “digital platforms with paramount importance for competition,” saying that these firms should be subject to “specific scrutiny” in Europe and an enhanced regulatory framework.¶ In different EU jurisdictions, competition authorities are increasingly weaving the precautionary principle into regulation of technology markets with the idea that new ex ante rules should be imposed ahead of any actual anticompetitive behavioral violation. Legislation pending in the German Bundestag is in this vein. For its part, the French government has put forward a legislative proposal to regulate “systemic platforms.” Under the French plan, competition regulators would be authorized to surveil and block planned acquisitions of European tech startups of almost any size.

### 1NC – No Solvency – Data

#### No solvency – lack of optimization makes AI military application ineffective

Konaev and Chahal 2021 – research fellow and research analys with the Center for Security and Emerging Technology

Margarita Konaev Husanjot Chahal April 2021 “The Path of Least Resistance: Multinational Collaboration on AI for Military Logistics and Sustainment” CSET Issue Brief

This is not to say that adopting and developing, let alone collaborating on AI-enabled logistics will be an easy task for the U.S. military and allied defense organizations. The ML and deep learning algorithms behind commercial AI-enabled logistics are generally not optimized for military needs.39 And if the experience of the Department of Defense is any indication, there are multiple challenges with regards to the data needed to power AI applications—from lack of data to problems with traceability, access, and interoperability of data collected by different systems.40 Moreover, data security and privacy concerns as well as different legal frameworks for how personal data is collected, handled, processed, and stored remain a critical barrier to international collaboration. Lack of clarity surrounding how to implement the exemptions for research incorporated into the General Data Protection Regulation, for example, has stalled collaboration between the U.S. National Institutes of Health and some European counterparts.41

### 1NC – Espionage Turn

#### increased integration makes cyber espionage more likely

Konaev and Chahal 2021 – research fellow and research analys with the Center for Security and Emerging Technology

Margarita Konaev Husanjot Chahal April 2021 “The Path of Least Resistance: Multinational Collaboration on AI for Military Logistics and Sustainment” CSET Issue Brief

Finally, on the technical front, there are numerous challenges to ensuring that hardware and digital systems are interoperable and secure. Creating and maintaining common or interoperable information systems and databases is a massive undertaking considering that in each country, the data resides in repositories lacking standardized formatting or maintained by contractors that keep such information proprietary, especially for data on sensors and weapon systems. Shared information systems and databases are also particularly vulnerable to disruption, manipulation, and data theft in part because of discrepancies in countries’ network security protocols and capabilities.26 These problems are hard to resolve in their own right. But the aforementioned political factors, especially the push toward greater data sovereignty by some of the European allies, only exacerbate these technical challenges for collaborations on AI.