# Prep Examples

## UNSC Tech Policy Aff Case

### Bioweapons (1:00)

#### Russia is committed to using its permanent membership to erode prohibitions against chemical and biological weapons

**Lentzos & Littlewood 20 - Filippa Lentzos, Jez Littlewood, Bulletin of the Atomic Scientists, December 11, 2020** “How Russia worked to undermine UN bioweapons investigations”[https://thebulletin.org/2020/12/how-russia-worked-to-undermine-un-bioweapons-investigations/] Accessed 4/11/24 SAO

An old split. The Russian resolution and other efforts to weaken international capabilities to undertake impartial and objective investigations into allegations of chemical and biological weapons use are stark reminders that the geopolitical calculations that have divided the world before continue. On one side in the November vote were countries like China, Cuba, Iran, Russia, Syria, and Venezuela, who supported the primacy of state sovereignty and the veto powers of the Security Council. On the other side were countries in the European Union, Australia, Canada, New Zealand, Switzerland, the United Kingdom, and the United States, seeking to uphold available mechanisms to bypass the veto of the Security Council and reduce the primacy of sovereignty. Stuck in the middle were countries like Argentina, Brazil, India, Indonesia, Malaysia, and Mexico, who did not wish to be forced publicly to choose between these two poles. In 1980, when Western countries first proposed a General Assembly resolution to give the secretary-general a mechanism for investigating biological and chemical attacks, it was adopted in a 78-to-17 vote that fell largely along the lines of Cold War alliances. Thirty-six countries abstained from the vote altogether. Julian Perry Robinson, who for decades helped guide international thinking on chemical and biological weapons, noted at the time that the politics of the Cold War ruled, “with the division of the General Assembly vote [falling] emphatically along East–West lines and a clear disinclination on the part of prominent sectors of the nonaligned world to become involved.” Today, the stakes of global division are even higher. The Syrian conflict involved widespread use of chemical weapons and they have been used in Iraq by a terrorist group. Beyond their use by terrorists and in internal conflicts, certain chemical weapons (Novichok and VX) have been used recently as weapons of assassination. The Chemical Weapons Convention has, overall, coped well with the alleged use of chemical weapons over the last seven years. Its counterpart, the Biological Weapons Convention, has no dedicated international organization to implement it and no verification provisions. As a result, any alleged or suspected use of a biological weapon would require countries in the convention to either seek a Security Council or a secretary-general’s investigation. While there have not been any requests for investigations into alleged biological weapons use to date, the COVID-19 pandemic has raised concerns about the potential attractiveness of disease as a weapon, demonstrating the need to ensure appropriate investigation mechanisms are in place. Some countries, key among them Russia, want the Security Council—where a veto can prevent an investigation—to control any future investigations into biological weapons use. Why obstruct independent investigations? The single most important lesson from investigations into alleged chemical weapons use is that intrusive investigations can work. Notwithstanding the differences between an epidemiological investigation of a suspicious disease outbreak and the chemical detection investigation of a chemical event, experience in investigating chemical weapons allegations—from the UN Special Commission on Iraq in the 1990s and the Syria missions in the 2010s—point to the fact that investigations work. All countries have learned this, even if some dislike it. The consequence has been greater efforts to stop, hinder, undermine, and contest the authority and work of investigation teams. These obstructionist approaches are playing out in multiple realms—in formal diplomatic settings, such as at the Organization for the Prohibition of Chemical Weapons (the administrative body that implements the chemical weapons treaty) and the United Nations, as well as in misinformation and disinformation campaigns aimed at influencing perceptions about the validity, accuracy, and fairness of investigations. The Syrian and other experiences point to investigations becoming more contentious, complex, and important, suggesting any secretary-general-led bioweapons investigations, if they are to occur, will be politically difficult and technically complex. They also suggest that if the perpetrator has a protector on the Security Council, any efforts to assign blame will be challenged at every level. Russia’s underhand proposal to give more power to the Security Council over chemical and biological weapons investigations is not, as Russia would have others believe, a sign of the inability of the secretary-general to conduct such investigations. Rather, it is a signal that Russia, and those like China that supported the Russian resolution right from the start, fear the possibility that an independent impartial process might be beyond their control and veto. Forty years after the General Assembly gave the secretary-general broad authority to investigate alleged chemical and biological weapons use, that power is still under threat, particularly when it comes to investigating allegations of biological weapons use given that no organization exists to implement the Biological Weapons Convention.

#### Degradation of norms against bioweapons cause rapid democratization of tech

**Millett & Snyder-Beattie 17 - Piers Millett, is a Senior Research Fellow and Andrew Snyder-Beattie, Director of Research; both at the University of Oxford, Future of Humanity Institute, in the Journal Health Security, August 1st 2017** “Existential Risk and Cost-Effective Biosecurity” [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5576214/] Accessed 4/11/24 SAO

Perhaps the most interesting implication of the fatalities following a power law with a small exponent is that the majority of the expected casualties come from rare, catastrophic events. The data also bear this out for warfare and terrorism. The vast majority of US terrorism deaths occurred during 9/11, and the vast majority of terrorism injuries in Japan over the past decades came from a single Aum Shinrikyo attack. Warfare casualties are dominated by the great power wars. This suggests that a typical individual is far more likely to die from a rare, catastrophic attack as opposed to a smaller scale and more common one. If our goal is to reduce the greatest expected number of fatalities, we may be better off devoting resources to preventing the worst possible attacks. Why Uncertainty Is Not Cause for Reassurance Each of our estimates rely to some extent on guesswork and remain highly uncertain. Technological breakthroughs in areas such as diagnostics, vaccines, and therapeutics, as well as vastly improved surveillance, or even eventual space colonization, could reduce the chance of disease-related extinction by many orders of magnitude. Other breakthroughs such as highly distributed DNA synthesis or improved understanding of how to construct and modify diseases could increase or decrease the risks. Destabilizing political forces, the breakdown of the Biological Weapons Convention, or warfare between major world powers could vastly increase the amount of investment in bioweapons and create the incentives to actively use knowledge and biotechnology in destructive ways. Each of these factors suggests that our wide estimates could still be many orders of magnitude off from the true risk in this century. But uncertainty is not cause for reassurance. In instances where the probability of a catastrophe is thought to be extremely low (eg, human extinction from bioweapons), greater uncertainty around the estimates will typically imply greater risk of the catastrophe, as we have reduced confidence that the risk is actually at a low level.48 §§§ Given that our conservative models are based on historical data, they fail to account for the primary source of future risk: technological development that could radically democratize the ability to build advanced bioweapons. If the cost and required expertise of developing bioweapons falls far enough, the world might enter a phase where offensive capabilities dominate defensive ones. Some scholars, such as Martin Rees, think that humanity has about a 50% chance of going extinct due in large part to such technologies.49 However, incorporating these intuitions and technological conjectures would mean relying on qualitative arguments that would be far more contentious than our conservative estimates. We therefore proceed to assess the cost-effectiveness on the basis of our conservative models, until superior models of the risk emerge. How Bad Would Human Extinction Be? Human extinction would not only end the 7 billion lives in our current generation, but also cause the loss of all future generations to come. To calculate the humanitarian cost associated with such a catastrophe, one must therefore include the welfare of these future generations. While some have argued that future generations ought to be excluded or discounted when considering ethical actions,50 most of the in-depth philosophical work around the topic has concluded that future generations should not be given less inherent value.51-55 Therefore, for our calculations, we include future lives in our cost-effectiveness estimate.\*\*\*\* The large number of future generations at stake mean that reducing existential risk even by a small amount may have very large expected value. The Earth is thought to be habitable for roughly another billion years;56 our closest relative, homo erectus, lasted over 1.6 million years,57 and the typical mammalian species also lasts on the order of 1 to 2 million years.58 Following Matheny,29 if we were to assume that humanity would otherwise maintain a global population of 10 billion for the next 1.6 million years, human extinction would jeopardize on the order of 1.6 × 1016 life years.

#### Interconnectivity means democratized bioweapons are the most likely threat of extinction.

**Larsen et al 20 - Nicklas Larsen, Senior Advisor, Copenhagen Institute for Futures Studies, & Søren Bach Jensen, Casper Skovgaard Petersen & Marius Merz, June 25th, 2020** “Future pandemics: A growing existential risk”[https://medium.com/copenhagen-institute-for-futures-studies/future-pandemics-a-growing-existential-risk-9c08f3d5358e] Accessed 12/8/23 SAO

We live in a risk society, as the German sociologist Ulrich Beck put it in his seminal book of the same name. Although the book was first published 1986, the key ideas Beck put forth still apply to our present day. Essentially, Beck posits that society has evolved from the first modernity, where the classic industrial society was able to calculate and predict the risks it was facing, to the second modernity of our contemporary age. The extremely high level of uncertainty that characterises this second modernity makes it impossible to calculate and predict risks in the same way as before. In parallel with the advent of the risk society, the global risk landscape has also become more complex and interconnected. We have entered the era of global risks that stem from both man-made and natural sources, or a combination of both: climate change, a malevolent super AI, nuclear bombs, bioterrorism, cyber-attacks and, of course, pandemics. To further add to this complexity, there are distinctions to make in this global risk landscape. A global catastrophic risk is a hypothetical future event that could harm human well-being on a global scale, even endangering or destroying modern civilisation, whereas an event that possibly could lead to human extinction is an existential risk, as the Swedish author and philosopher Nick Bostrom defines it: ‘One where an adverse outcome would either annihilate Earth-originating intelligent life or permanently and drastically curtail its potential’. While some of these existential risks stem from nature and are thus out of our control — asteroid impacts or super volcanoes for example — other threats facing us are man-made. Throughout history, human ingenuity has produced technologies with double-edged capabilities. Perhaps the most dramatic example came with the capability to harness the atom, with nuclear power and nuclear weapons being the by-products. This marked the dawn of a new epoch in which humankind achieved the ability to destroy itself, with a few very close calls happening especially during the Cold War. Since then, nuclear weapons have now been joined by other emerging technological risks such as nanotechnology and AI. THE EXPANDED RISK LANDSCAPE OF PANDEMICS Although it has been a novel experience for most people living through it, the COVID-19 pandemic was not an unanticipated event. In fact, a respiratory virus-enabled pandemic like COVID-19 was deemed likely or even expected by virologists. The interconnectedness of modern-day civilisation has made it much easier for a pandemic to spread globally in days or weeks rather than months, and the frequency of outbreaks is accelerated by ecosystem collapse, demographic developments and global warming. In any given month, The World Health Organization now traces roughly 7.000 signals of potential outbreaks, conducts 300 follow-ups, and leads 30 investigations. In the month of June 2018, for the first time ever, the WHO tracked outbreaks of six of the eight of the ’priority communicable diseases’, like Zika and MERS happening at the same time. WHO’s list of potential outbreaks also includes ‘Disease X’, representing the fact that a future epidemic or pandemic could also be caused by a pathogen unknown to us at the current time. Below, we take a closer look at some of the global trends that will accelerate the emergence and spread of disease in the future. The rise of megacities The transition from rural to urban life is a defining characteristic of our age. By 2050, two-thirds of the world’s 9,8 billion people will live in urban areas, up from around half of the world population living in cities today. This movement of people from the countryside to cities is driven by the promise of increased economic opportunity, access to healthcare, connections, education, and increased mobility. During the next decade, the number of megacities (defined as 10 million inhabitants or more) will increase to 39 by adding Chicago, Bogota, Luanda, Chennai, Baghdad, and Dar es Salaam to the list. With more than 80% being in low- or middle-income countries, megacities with large parts of the populations living in slums heightens the risk of disease spreading effortlessly. Novel outbreaks will have fertile ground for spreading exponentially, as seen in metropoles and travel hubs of today like New York City. The megacities of the future will be densely populated hubs for transnational commerce, mobility, and hyper-connected which all amplify pandemic risk. With the growing risk of pandemics occurring in the future, the need to bolster the pandemic resilience of cities will only get more pressing. Researchers at the Senseable City Lab at MIT offer a glimpse into some of the features of the pandemic-proof city of the future. As part of their project named ‘Underworlds’, they placed sensors in sewers to detect concentrations of illegal drugs and harmful bacteria in specific areas. The researchers propose to develop a new kind of human health census by sampling the ‘urban gut’ and thus providing early signals of things like contagious disease with geographical precision. A city built with lessons from pandemics might be filled with systems such as these to help map the spread of disease. While technology can get us some of the way, it can’t solve some of the more structural issues that lie at the heart of why and how outbreaks of disease become epidemics or pandemics. Outbreaks of disease tend to hit underprivileged or marginalised population groups the hardest, and to effectively curb the spread of disease in the future, we not only need to expand our urban and technological resilience, but arguably (and chiefly) our social and community resilience as well. Global warming and increased human-wildlife interfacing Pandemics and global warming remind us that nature is powerful, and that despite all our modern gadgets, we are still subject to its temperaments. Our current situation is a terrifying harbinger of the pandemics that can be brought about in the future if global warming continues to further destabilise the natural world. Already today, global warming is exposing new threats. The warming planet is melting permafrost that has been frozen for decades or longer, releasing ancient viruses and bacteria that have lain dormant. Out of the meltwater, smallpox or the Spanish flu could be given a second chance, or something completely different we do not want to discover could be ‘released’ into the world. Rising global temperatures are also expanding the geographical reach of diseases like zika, dengue fever, and malaria, as these infectious diseases and their vectors, like mosquitos, thrive better in a warmer and a more humid climate. Additionally, global warming is also changing the water cycle, leading to heavier rainfalls and higher risks of floods, and consequently spreading water-borne diseases like cholera. This is especially problematic in the world’s poorest regions which are unable to invest heavily in climate mitigation infrastructure. COVID-19 breached natural boundaries at the interface between human activity and wild ecosystems. A major factor driving such spillover events is the loss of natural ‘buffers’ between humans and wild ecosystems, exemplified through deforestation, bushmeat hunting, and the traditional Asian open wet markets. Additionally, the world’s growing demand for domesticated meat is greatly increasing the number of pigs and chickens on the planet, increasing the chances of a pig or avian influenza to make the jump from animals to humans. Democratisation and proliferation of biotechnology In the past two centuries, we went from discovering the world of microbes invisible to the human eye to growing them in petri dishes, sequencing their genomes and now, altering their DNA. Just in the past 10 years, we have seen major breakthroughs in our biotechnological capabilities, such as the use of gene drives, the genetic cut-and-paste tool CRISPR-Cas9, and the world’s first genetically modified babies. A gene drive is a genetic mechanism by which a desired genetic sequence can be spread through a population faster than traditional inheritance. This strategy can be so effective that traits can spread even if they result in a disadvantageous trait, such as sterility. Thus, gene drives present potential new solutions for a variety of issues facing humanity, including eradicating, or altering disease carriers such as mosquitoes and controlling invasive species of plants, insects, or toads. What is worrisome, however, is that these biotechnological breakthroughs are not only in the hands of state actors and institutions. The rapid democratisation of biotech has made these powerful tools increasingly available to groups from the undergraduate biologist to the DIY biohacking communities. When the first human genome was sequenced in 2001, it took almost 15 years and the cost was around $2,6 billion. Today, a genome can be sequenced in an hour for a price of less than $1.000. While our growing biotechnological knowledge has benefits, it is a double-edged sword and can be misused — intentionally or unintentionally — in ways that can cause great harm. As the number of people with access to the technology grows, so does the risk for the technologies to be misapplied with deadly and global impact. Error or terror: bad bugs or bad guys? A biotechnological catastrophe may be caused by an engineered organism being accidentally released from controlled research environments, by the planned release of such an organism which then turns out to have unforeseen and catastrophic interactions with ecosystems, or by intentional usage of biological agents in biological warfare or bioterrorism attacks. The existential risks posed by most scientific and medical research is negligible. However, there is ongoing research into live agents of smallpox, SARS, H5N1, and avian flu, which, if escaped mistakenly, could wreak havoc. It is likely possible to engineer pathogens that are even more dangerous than the natural strains by increasing their incubation time, transmissibility, lethality, or resistance to vaccination and treatment. Research by well-intentioned actors into potential pathogens of pandemic, both natural — and down the road synthetic — is a path society can pursue to try to stay one step ahead of bad actors by exploring the space of possibilities and prepare adequately. Engineering pathogens to study them of course comes with its own set of dangers, but the benefits to resiliency might outweigh the risks and thus presents a fine line to be walked by the scientific community and its regulators. The technological means to genetically modify pathogenic characteristics are likely to become more widely available in the future. **The main candidate for biological existential risk in the coming decades thus stems from our own technology and particularly the risk of misuse by groups** or even individuals. Capabilities that were once only in the hands of governments and universities are increasingly moving into the living rooms and garages of individuals. Nick Bostrom from The Oxford Future of Humanity Institute estimates from a survey among researchers a 5% probability of a pandemic of catastrophic proportions (1 billion deaths) from natural sources by 2100 and estimate a 10% probability from an engineered pandemic. RISK AS A PERMANENT FEATURE OF FUTURE SOCIETY The human mind is not naturally well-wired to intuitively deal with very small probability events like winning the lottery, asteroid strikes, or pandemics. It is equally bad at dealing with multigenerational, slow moving events like climate change. The unintuitive understanding of risk is even further exacerbated by numerous cognitive biases which influence our judgments of the importance of existential risks. Be it nuclear annihilation, a hostile rogue AI, global warming, or pandemics, natural or bio-engineered, we need to care and prepare for these low-probability high-impact events. Policy implications include the formation of global biotech related governance, legislation, and enforcement, or even a global body like the IPCC or the United Nations Framework Convention on Climate Change. On the national level, we need to be developing oversight of the use and misuse of bio-technology, research, and eventual deployment of early warning systems. On the personal level, we need to work towards recognition of the unintuitive risks, raising awareness, and proactively building societal resilience. Existential risks are, by nature, transnational and intergenerational. Acting on these risks is valuing and caring appropriately for the unborn generations. Mitigation requires global cooperation, creative solutions, and collective action. Awareness and attention is the first step to muster the political willpower and international capacity required to deal with risks on the existential scale. Human advancements create a completely new and uncertain risk landscape. As a side effect of modernity, we ourselves have created risks that challenge our very existence. However, once we understand that we all depend on each other, we can use this interdependence as a unique opportunity. When we realise that we all share risks, we should instinctively come to the conclusion that we all share the responsibility. This realisation of shared responsibility should then be translated into shared aspirations for improvement through building strong institutions powerful enough to initiate fundamental change — change that could not have been initiated by just the few. We need to respond to globalised risks with globalised security that lays the groundwork for international efforts to minimise risks while maximising resilience. Global insecurity gives us an opportunity that has never been there before: It makes us realise that solidarity and cooperation among the collective is the only way to secure the individual in a time without global leadership.

### Liberal Internationalism (1:00)

#### Ukraine is the lynchpin of global liberalism

**Goncharenko 24 - Oleksiy Goncharenko is a Ukrainian member of parliament with the European Solidarity party., Atlantic Council, April 7th, 2024** “Western weakness in Ukraine could provoke a far bigger war with Russia” [https://www.atlanticcouncil.org/blogs/ukrainealert/western-weakness-in-ukraine-could-provoke-a-far-bigger-war-with-russia/] Accessed 4/10/24 SAO

Does the West actually want Ukraine to defeat Russia? That is the question many in Kyiv are now asking amid continued signs of Western indecision as the biggest European invasion since World War II approaches its third summer with no end in sight. The mounting sense of frustration among Ukrainians is easy to understand. Encouraged by delays in military aid for Ukraine, Russia has intensified the bombing of Ukraine’s civilian infrastructure over the past month, plunging entire cities into darkness and leaving millions without access to electricity, heating, water, or internet. Despite the looming prospect of a humanitarian catastrophe, the Western response has been notably lacking in urgency. Meanwhile, Ukraine has begun striking back with drone attacks on Russian refineries, and has succeeded in disrupting more than ten percent of Russian refining capacity. Rather than supporting this seemingly effective campaign to weaken Putin’s war machine, The US has reportedly called on Kyiv to end its drone strikes due to concerns over global oil prices and possible retaliation. Viewed from Ukraine, these do not look like the actions of partners who are fully committed to Ukrainian victory. Over the past two years, Ukrainians have grown accustomed to excessive Western caution and insufficient Western support. While the democratic world deserves considerable credit for delivering the weapons that have allowed Ukraine to survive, the military aid provided since February 2022 has been subject to frequent delays, and has consistently fallen far short of the quantities required to defeat a military superpower like Russia. The West’s inadequate response to Russia’s invasion is primarily due to a crippling fear of escalation. Putin sees this indecisiveness and acts accordingly. He easily intimidates Western leaders with nuclear blackmail, while escalating his own attacks on Ukrainian cities and the country’s civilian infrastructure. In March 2024 alone, Russia attacked Ukraine with 264 missiles and 515 drones, according to Ukrainian Air Force data. Some were intercepted by Ukrainian air defenses, but ammunition is rapidly running out. With no clear idea of when the next batches of interceptor missiles may arrive, Ukrainian troops must ration supplies, leaving millions vulnerable to the horrors of Russian bombardment. The situation on the front lines of the war is equally critical. With half of promised weapons deliveries arriving late and vital US military aid held up in Congress for the past eight months, Ukrainian troops are running short of crucial ammunition and are currently in danger of being overwhelmed by Russian firepower. In late March, President Zelenskyy admitted that if US aid is not forthcoming, Ukraine will be forced to retreat. If that happens, he warned, Russia could break through Ukraine’s defensive lines and attempt to seize the country’s biggest cities. Despite this deteriorating picture, there is currently a surreal sense of business as usual in much of the West. The political classes are increasingly preoccupied with upcoming elections and appear largely unaware of the geopolitical disaster unfolding on Europe’s eastern frontier. Many seem to think Ukrainian courage alone will be enough to hold Russia back until the invasion runs out of steam. This is wishful thinking. In reality, if Ukraine does not urgently receive increased support, there is a very real chance that Putin will win. And if Putin wins in Ukraine, he will go further. At present, the West appears content to wage of a slow war of attrition while drip-feeding Ukraine minimal supplies. This is a recipe for defeat. Russia enjoys huge advantages in terms of manpower and weapons, while the Kremlin has successfully shifted the entire Russian economy onto a war footing. Putin clearly believes he can outlast the West in Ukraine, and is confident time is on his side. This does not mean a Ukrainian victory is unachievable, but Ukraine’s partners need to demonstrate far more resolve if they genuinely hope to secure Putin’s defeat. Ukraine’s long-range drone attacks on Russian refineries have exposed the vulnerability of Russia’s economically crucial energy industry, but the Western response has so far been predictably cautious. This needs to change. Ukraine cannot win a war against such a powerful enemy with one hand tied behind its back. Likewise, Ukraine’s remarkable success in the Battle of the Black Sea debunks notions of Russian red lines and offers a road map toward victory over the Kremlin. Despite not having a conventional navy of its own, Ukraine has used drones and missile strikes to sink around a quarter of the Russian Black Sea Fleet. This has forced Putin to quietly withdraw the bulk of his remaining warships from Crimea. Similar success is possible on land if Ukraine’s Western partners give the country the tools it needs. Ukraine’s requirements are already well known; the Ukrainian military needs vast quantities of artillery shells and drones along with increased deliveries of armored vehicles, combat aircraft, air defense systems, electronic warfare technologies, and long-range missiles. Without this military aid, Ukraine’s prospects look grim. Nor would the consequences of a Russian victory be confined to Ukraine alone. On the contrary, the shock waves would be felt around the world as Putin and his fellow autocrats sought to capitalize on Western weakness. A triumphant Putin would almost certainly look to build on the considerable geopolitical momentum created by success in Ukraine. In practical terms, this would mean expanding his quest to reverse the verdict of 1991 and reclaim “historically Russian lands.” Putin’s revisionist agenda would place more than a dozen independent states that formerly belonged to the Russian Empire at risk of suffering the same fate as Ukraine. The most probable initial targets would include Moldova, Georgia, Belarus, and Kazakhstan, but his ambitions would likely expand further. The fall of Ukraine would leave NATO demoralized and discredited, **creating a once-in-a-lifetime opportunity for the Russian dictator to achieve his ultimate goal and instigate the break-up of the alliance**. NATO leaders have already demonstrated that they are afraid of escalation and inclined to back down when confronted by the Kremlin. In a post-Ukraine environment, Putin may look to exploit this lack of resolve by testing NATO’s own red lines while stopping short of full-scale hostilities. If the alliance failed to rise to this challenge, it would risk losing all credibility overnight. While NATO could technically survive such a crisis, the alliance would struggle to maintain any legitimacy without its cast-iron commitment to collective security. Fellow authoritarian powers like China and Iran are also watching the West’s weakness in Ukraine and are drawing the obvious conclusions. This is already helping to fuel insecurity in the Middle East and increasing the threat to Taiwan. The global security architecture established over the past eighty years is clearly crumbling, and **Ukraine is the front line in the fight to shape the future of international relations**. The West’s fear of escalation is Vladimir Putin’s secret weapon. It has deterred Western leaders from arming Ukraine, and has prolonged the war by preventing the Ukrainian army from building on its early battlefield successes. Unless the West can overcome this self-defeating fear, it may ultimately lead to Russian victory. Russian success in Ukraine would almost certainly set the stage for a far bigger military confrontation between the Kremlin and the democratic world. Since February 2022, Putin has placed his entire country on a war footing and has positioned Russia as the leader of an anti-Western coalition of authoritarian states aiming to transform the world order. As the invasion of Ukraine has escalated, he has become increasingly open about his own imperial ambitions. It is dangerously delusional to suggest Putin will simply stop if he wins in Ukraine. Instead, Western leaders must decide whether they would rather arm Ukraine for victory today, or find themselves confronted with a resurgent and emboldened Russia tomorrow.

#### Permanent membership gives Russia a platform for disinformation and stifles international action

**Wesolowsky 22 - Tony Wesolowsky, senior correspondent for RFE/RL in Prague, Radio Free Europe, March 17, 2022** “Where Are The Blue Helmets? Why The UN Can't Keep The Peace In Ukraine” [https://www.rferl.org/a/russia-invades-ukraine-un-peacekeeping/31758188.html] Accessed 4/10/24 SAO

Multiple UN agencies are mobilizing to alleviate the suffering inflicted by Russia's unprovoked invasion of Ukraine. But in the UN Security Council there is only gridlock as Russia wields veto power as one of the five permanent members. Russia has not only vetoed a UN Security Council resolution condemning its invasion, **but used the council to spread Kremlin disinformation**, including widely discredited claims about U.S.-funded biological laboratories in Ukraine, experts say. The actions of Russian leader Vladimir Putin, condemned as a "war criminal" by U.S. President Joe Biden on March 16, coupled with the Security Council's reaction so far, have sparked calls for reform with one European defense minister even suggesting that the UN be scrapped amid questions whether the world body is up to the task of maintaining global security and peace. And given the showdown in the Security Council, some UN watchers are predicting years of inaction ahead as during the darkest days of the Cold War. The current crisis is the ***most alarming episode*** of a longer-term trend at the Security Council, largely pitting Russia and its ally China against the West, said Richard Gowan, UN director at the International Crisis Group think tank, in an interview with RFE/RL. "The Security Council has been on a path to irrelevance for quite some time. It's now over a decade since we first started to see the U.S. and Russia deadlock over Syria in the Security Council. Since 2011, Russia has cast its veto 17 times on issues related to Syria and China has often joined in these vetoes," Gowan said. The United Nations, which was established in 1945 in the wake of World War II, is facing its greatest challenge ever, according to Mark Malloch-Brown, a former UN deputy secretary-general and current president of the Open Society Foundations, a private funder of NGOs backed by investor and philanthropist George Soros. Russia's "brazen crime of aggression" is a "threat to the post-1945 order," Malloch-Brown told a virtual conference hosted by the International Peace Institute on March 11. "**This is not just another war. This is a** system-shaking**, system-breaking conflict with huge consequences that go way beyond** even the tragedy of the destruction of life and property in Ukraine itself." On February 25, a day after it invaded Ukraine, Russia was alone in the UN Security Council in voting against a resolution condemning its actions. China abstained, which was viewed as a win for Western diplomacy, given it came just weeks after Beijing and Moscow declared a "no limits" partnership. Vetoed in the Security Council, the same resolution passed in the General Assembly, where no country has veto power, but where resolutions are mostly symbolic as they are nonbinding. On March 2, during a special session dedicated to Ukraine, the resolution deploring Russia's actions was approved by 141 votes to five. Moscow won only the support of Belarus, North Korea, Eritrea, and Syria. Thirty-five countries abstained. 'An Extraordinary Moment' "The message of the General Assembly is loud and clear," said UN Secretary-General Antonio Guterres. "End hostilities in Ukraine now. Silence the guns now. Open the door to dialogue and diplomacy now." "This is an extraordinary moment," declared U.S. Ambassador to the United Nations Linda Thomas-Greenfield after the General Assembly vote. "Now, at more than any other point in recent history, the United Nations is being challenged. If the United Nations has any purpose, it is to prevent war, it is to condemn war, to stop war." Ukrainian President Volodymyr Zelenskiy hailed the outcome as well, saying it showed "that a global anti-Putin coalition has been formed and is functioning. The world is with us." The momentum was short-lived, however. While Moscow suffered a setback in the General Assembly, back at the Security Council on March 11 Russia called for a debate amid claims its military had uncovered evidence of a U.S.-funded military biological program in Ukraine. Thomas-Greenfield said Russia was playing out a scenario put forth in the council last month by U.S. Secretary of State Antony Blinken -- that Putin would "fabricate allegations about chemical or biological weapons to justify its own violent attacks against the Ukrainian people." Russia's claims were quickly discredited. UN High Representative for Disarmament Affairs Izumi Nakamitsu said the "United Nations is not aware of any biological weapons programs." "The labs are not secret," said Filippa Lentzos, a senior lecturer in science and international security at King's College London, in an e-mail to the AP news agency. "They are not being used in relation to bioweapons. This is all disinformation." Since an agreement made in 2005, the Pentagon has assisted several Ukrainian public health laboratories with improving the security of dangerous pathogens and technology used in research. Describing the March 11 session as "high farce," Malloch-Brown said it highlighted how the Kremlin was using the Security Council to spread its disinformation. "Obviously a council member must have the right to bring issues to the council, but when the culture of council behavior is reduced to this sort of performative art for Russian prime-time news programs and is completely detached from any plausible truth about chemical activities inside Ukraine and is indeed being used as a rationale and a justification for a potential chemical weapons attack against the people of Ukraine, I think we have to really be concerned as to where this is going," Malloch-Brown told the IPI virtual gathering. The International Crisis Group's Gowan noted that while the claims may have been outrageous, it had been part of the Kremlin's playbook for a while. "Russia [has] convened a series of informal Security Council briefings, where it brought in essentially propagandists to lay out its version of what was happening in Ukraine and to accuse the Ukrainians of fascism," Gowan said. "And I think the reason that Russia does this is precisely that, in a world of more and more splintered official media and fragmented social media, the Russians can use screen grabs from these **council meetings and broadcast their versions of events at home**," Gowan said, noting that the Soviet Union accused the United States of using biological weapons during the Korean War in the 1950s. Russia's invasion of Ukraine has been described by U.S. defense officials as the largest conventional military attack since World War II, with over 3 million Ukrainians fleeing the country amid Russia's widespread bombardment of civilian targets. While there have been calls by Ukraine and others for NATO to enforce a no-fly zone, most Western leaders are wary of such a move, fearing a wider conflict with Russia. Czech Defense Minister Jana Cernochova has called for the UN to step in with peacekeepers, arguing not to do so would question the point of having the UN around. "When something of this scale is happening and the UN is unable to take firm steps, then it is hopeless. They should find a way to send in blue helmets, that is, soldiers who would oversee respect for human rights and supplies. If the UN is incapable of doing that, then it is time to change it," Cernochova told Czech public TV on March 13. But such a force would need the approval of the Security Council, said Farhan Aziz Haq, deputy spokesman for the UN secretary-general, in written comments to RFE/RL. "Questions concerning the deployment of a peacekeeping mission in Ukraine are in the hands of the Security Council. The secretary-general doesn't have this type of authority," Haq told RFE/RL. Humanitarian Relief While sending in peacekeepers is not easy, the UN has stressed that its agencies have been active on several fronts to alleviate the suffering of hundreds of thousands of people impacted by Russia's aggression. "The UN and our humanitarian partners are committed to staying and delivering, to support people in Ukraine. Our staff are working on both sides of the contact line, always guided by the humanitarian principles of neutrality, impartiality, humanity, and independence," wrote Haq. "We are providing lifesaving humanitarian relief to civilians in need, regardless of who or where they are." Haq cited the work of the United Nations' World Food Program, which he said was reaching 3.1 million people "through the use of cash-based transfers as well as in-kind food distributions." "Over the weekend, a UNICEF convoy of 22 trucks arrived in Ukraine with 168 tons of supplies, including midwifery kits, surgical kits, obstetric kits, oxygen concentrators, cold boxes, blankets and winter clothes, water, sanitation and hygiene kits, dignity kits, early childhood education kits, and adolescent kits," Haq added.HU 'Performative Black Arts' And 'Deadlock' Such efforts are what the UN should focus on, argued Malloch-Brown. "It needs to take stock of what it can do and what it can't do, and perhaps recognize it is in the humanitarian, human rights, information reporting, and possibly coordinating with the IFIs (international financial institutions) the development response to a global economic crisis that will follow this," he said. "[This] is where its comparative advantages lie, and the Security Council is perhaps condemned to remain performative black arts followed by deadlock for years to come." Ukrainian Foreign Minister Dmytro Kuleba called on the UN on March 2 to reconsider Russia's status as a permanent member of the Security Council. Kuleba called for a "thorough and unbiased" legal review of Russia's permanent membership. "We are confident that when the analysis is complete, it will be evident that Russia's presence at the UN Security Council is illegitimate," Kuleba said. That would be easier said than done. "There are clauses in the UN Charter about expelling members that egregiously break the organization's rules, but that requires a recommendation to do so from the Security Council, which Russia could block," said Gowan.

#### Disinformation shores up domestic support

**Hill 22 - IAN HILL, Senior Fellow in the Centre for Strategic Studies at Victoria University of Wellington Lowry Institute, April 21st, 2022** “Rallying around the flag: Domestic support for Putin is holding up” [https://www.lowyinstitute.org/the-interpreter/rallying-around-flag-domestic-support-putin-holding] Accessed 4/11/24 SAO

Yet, even if Russians (instinctively mistrustful of government, and expert at reading between the lines) doubt what they are told about the Ukraine conflict, the pervasiveness of the propaganda tends to shape their world view, deluding them that the West is hostile to Russia. Moreover, many Russians want to believe what they are being told – especially by Putin, their contemporary vozhd (all-powerful leader) – perhaps sub-consciously conforming with the historical characterisation of how the authorities were purportedly viewed in imperial Russia: “good Tsar, bad courtiers”. Some find it hard to accept (or do not want to believe) their country could be in the wrong in taking military action in Ukraine. For others, it may be purely a survival tactic. The more horrifying the allegations of Russian brutality, the greater the impulse to deny them as lies, reinforcing the siege mentality. Many patriotic and proud Russians will support their leader standing up to Western pressure, whether political or economic, rallying around the flag. More deeply, the regime is abetted by the traditional political apathy and cynicism of ordinary Russians. Reinforcing this political disengagement is fear. The Kremlin has the will and coercive capacity to crush any opposition and dissent ruthlessly. Whatever their views, most Russians will keep their heads down, out of a sense of self-preservation. What might change this, and erode domestic support for Putin? Could growing economic hardship lead to popular unrest, threatening the regime? There’s no doubt that punitive Western sanctions will damage the Russian economy and impoverish ordinary Russians. Economic growth is projected to fall by at least 11 per cent this year, while inflation will eat into already declining real incomes. Sanctions won’t force Putin to change course. Russia has expanded its self-sufficiency in areas such as agriculture over the past decade, while oil and gas revenue remains buoyant, giving the Kremlin headroom to placate discontent. Moreover, Russians are resilient, and if the Kremlin shifts the Russia onto a “siege economy” footing, most will adapt to this readily enough. Yet there are real risks for Putin – especially the longer the war drags on. Public dissatisfaction may grow as economic hardship deepens, along with disillusionment and grief at Russia’s mounting casualties. But there exists no political mechanism to channel such discontent in itself, while the Kremlin’s enormous repressive force is sufficient to keep any popular unrest in check. It’s hard to gauge the mood within the Kremlin elites around Putin, especially among the powerful “securocrats”, those close, often shadowy, figures sharing his security service background. So far there are few public signs of elite dissent. ***But this could change,*** depending on how the war in Ukraine tracks over coming months, and the evolving mood “on the street”. While support for Putin could prove brittle, it’s at least as likely that isolation and pressure from the West could end up consolidating elite and popular support around an embattled and defiant regime in Moscow. Bear in mind too, there’s no guarantee at all that any successor to Putin would prove any more palatable from the West’s standpoint.

#### Failure of the liberal international model causes extinction

**Belfield 23 - Haydn Belfield, In the Book “How Worlds Collapse” Published 2023** “Collapse, Recovery, and Existential Risk” [https://www.taylorfrancis.com/chapters/edit/10.4324/9781003331384-6/collapse-recovery-existential-risk-haydn-belfield] Accessed 2/16/24 SAO

Democracies dominate contemporary global society. By “dominate” I mean that a majority of the world’s population lives in them (Roser, 2019), they form the majority of states (Magaloni & Kricheli, 2010), and perhaps most importantly, they have by far the preponderance of economic, “soft,” and military power (IISS, 2020). However, the world could instead be dominated by authoritarian or totalitarian regimes. I will focus in particular on totalitarian regimes, as they are the most concerning and make my argument clearest. 4.3.3.1 Why Could It Be Worse? A world dominated by totalitarian states would be more incompetent, more war-prone, less cooperative, and more inhibitive of progress than one dominated by democratic states. Our current world is not particularly competent, peaceful, cooperative, or progressive—a totalitarian-dominated world would be worse. It would increase the risk of another collapse and extinction and could shape the future toward less desirable trajectories (Beckstead, 2013). Totalitarian states are incompetent. They are bad at forecasting and dealing with disasters (Caplan, 2008).16 This can be seen most clearly in the great famines of Communist China and the USSR, in which millions died (Applebaum, 2017; Becker, 1996; Dikötter, 2010; Snyder, 2010). In comparison, functioning multiparty democracies rarely, if ever, experience famines (Sen, 2010). “Established autocracies” (or “personal”/“sultanist”) are particularly bad, as there are few checks or restraints on arbitrary rule and the whims and ideology of the single individual, even from other elites (Svolik, 2012). From the inside, the “inner circle” around Mao, Stalin, and Hitler seems incredibly chaotic, with elites strongly incentivized to conceal information and encouraged by the autocrat to squabble and feud—so they are divided (Conquest, 1992; Kershaw, 2008; Zhang & Halliday, 2006). If totalitarian states are worse at addressing social, environmental, and technological problems, then a world dominated by them would likely be worse at responding to risks of collapse and extinction. A world dominated by totalitarian states is more likely to have major wars. States with near-universal adult suffrage rarely (if ever) go to war with one another (Barnhart et al., 2020), so a world dominated by democracies has fewer wars. Miscalculation might be a particular problem for totalitarian states due to personalization and disincentives for accurate information, leading to well-known strategic disasters such as Hitler and Stalin’s blunders in World War II (Bialer, 1970; Noakes & Pridham, 2001), or at a smaller level, Saddam Hussein’s rejection of diplomacy (Atkinson, 1993). War makes collapse and extinction more likely, by raising the chance of weapons of mass destruction being used. Linked to this, totalitarian states are less cooperative than democratic states. While cooperation is possible (Ginsburg, 2020), their internal norms are characterized by paranoia and treachery, and their lack of transparency limits their ability to credibly commit to agreements. This is bad for all risks that require cooperation such as pandemics or climate change (Tomasik, 2015). Finally, continued social and scientific progress is likely to reduce risks of collapse and extinction. Social progress could reduce global inequality and other risk factors. Scientific progress could help address natural risks and climate change (Sandberg, 2018), differentially increase defensive rather than offensive power (Garfinkel & Dafoe, 2019), and solve safety challenges in AI or biotechnology (Russell, 2019). However, as we will now discuss totalitarian states would likely inhibit social progress. A central question from a longtermist perspective is: Which values should shape the future? I would argue that we should prefer it to be shaped by liberal democratic values. This is not to say that the current democracy-dominated world is perfect—far from it. The fate of billions of factory-farmed animals or hundreds of millions of people in extreme poverty makes that abundantly clear. However, democracies have two advantages. First, democracies have space for cosmopolitan values such as human rights, plurality, freedom, and equality. These are better than those that characterize life under totalitarianism: Fear, terror, subjection, and secrecy. Second, they have within themselves the mechanism to allow progress. In the last 100 (or even 50) years, the lives of women, LGBT people, religious minorities, and non-white people have dramatically improved. Our “moral circle” has expanded, and could continue to expand (Singer, 1981). The arc of the moral universe is long, but given the right conditions, it might just bend toward justice (King, 1968). A global society dominated by these values, and with the possibility of improving more, has a better longterm potential. A totalitarian-dominated world, on the other hand, would reduce the space for resistance and progress—distorting the human trajectory. We should be particularly concerned about “bottlenecks” at which values are particularly important—where there is a risk of “locking-in” some particular set of (possibly far from optimal) values. While they are currently faroff, future technologies such as artificial general intelligence, space settlement, life extension (of autocrats), or much better surveillance could enable lock-in (Caplan, 2008).17 Conditional on them avoiding new catastrophes, world orders dominated by totalitarians could be quite long-lasting (Caplan, 2008). Democracies can undermine authoritarian and totalitarian regimes through the following ways: Control, including conquest; contagion through proximity; and consent, promoting receptivity toward democratization (Whitehead, 2001). Democracies can actively undermine these regimes through war, sanctions, hosting rebellious exiles, or sponsoring internal movements. Passively, through contagion, they offer a demonstration that a better, more prosperous life is possible. For example, in the final years of the USSR, ordinary Soviet citizens were able to see that the West had a higher standard of living—more innovation, more choice, and more consumer goods. The elites were able to read books from the outside, and travel—Gorbachev’s contacts and friendships with European politicians may have made him more favorable to social democracy (Brown, 1996). Democracies can undermine the will and capacity of the coercive apparatus (Bellin, 2004). However, in a world not dominated by democracies, all these pressures would be far less. A world in which, say, totalitarian regimes emerged as dominant after World War II (for example if the USA was defeated) could be self-reinforcing and long-lasting, like the self-reinforcing relationship of Oceania, Eurasia, and Eastasia (Orwell, 1949). Orwell’s fictional world is characterized by constant low-grade warfare to justify emergency powers and secure elites, and with shifting alliances of convenience as states bandwagon and balance, thereby preventing any resolution. A totalitarian-dominated world order could be rather robust, perhaps for decades or even centuries. **A** long-lasting **totalitarian-dominated world would extend** the period of time humanity would spend with **a heightened risk of** collapse or **extinction**, as well as increased potential for distortion of the human trajectory and the possibility that a “lock-in” event may occur. This example illustrates the possibility of a “negative recovery,” resulting in a trajectory with less or no scientific and social progress and a less favorable geopolitical situation, which would threaten the destruction of humanity’s longterm potential.

### Space Nukes (1:15)

#### Russia is pursing space-based nuke to eradicate US commanded and control

**Wolfsthal 24 - JON WOLFSTHAL, Federation of American Scientists, 02.21.24** “For Heaven’s Sake: Why Would Russia Want To Nuke Space?” [https://fas.org/publication/russia-space-nuclear-weapons/] Accessed 3/26/24 SAO

It can be more than a little scary to look into the mind of a dangerous dictator like Vladimir Putin. But as Russia has several thousand nuclear weapons, managing stability and avoiding nuclear war requires that America try to understand what is happening with both the mind of the country’s leader and capabilities of its military. Deterrence is about understanding how our actions influence that of others, and vice versa. Thus, it remains essential to consider what Russia (and other adversaries) is pursuing in terms of possible contingencies, and interpret changes in military and strategic capabilities. So when news broke in February that Russia was reportedly building some nuclear connected anti-satellite weapon, a lot of people started scratching their heads. First, because of the manner in which the news was leaked. Congressman Mike Turner seemed to get ahead of both the process and the intelligence itself, and created a bit of a panic by demanding full and immediate declassification of all information about the system. It now seems this was alarmist, and perhaps motivated by other political factors. Leaks seemed to indicate that Russia might be planning to launch a nuclear-powered anti-satellite directed energy weapon into space. U.S. officials are reportedly telling allies Russia could launch the system into space within the next year. Details became a little clearer, thanks to a public briefing by White House Advisor Adm. John Kirby. Kirby confirmed that the planned system was still in development, and President Biden later said it was not clear if and when the system would be deployed. Importantly, Kirby also stated that the system, if deployed, would violate the Outer Space Treaty of 1967. That phrase made clear that the Russian program involved placing a nuclear weapon in outer space, since deploying nuclear weapons in space is the main and only specific constraint contained in the OST. What Can Putin Be Thinking? We can speculate that the Russian program would involve deploying a nuclear device in orbit, presumably with some maneuvering capability so that it can be detonated to disable satellites. A nuclear explosion in space would create a series of devastating effects, including an electromagnetic pulse, and longer-lasting radiation that would circle the earth and dramatically compromise satellite communications world-wide. Some hardened assets might survive, but other unshielded military and almost all non-shielded commercial satellites would be potentially vulnerable**. The global economic and communications system could be shut down or destroyed for years**, and some orbits made hazardous – if not unusable – for an extended period due to space debris. Who would do such a thing? Well, the Soviet Union and the United States considered a lot of dangerous nuclear ideas during the Cold War, including detonating nuclear weapons in outer space to blind an adversary’s space assets. The U.S. had a program in the 1960s called Casaba Howitzer, which would use nuclear explosions to drive energy beams to attack space assets. Both states tested nuclear weapons at high altitudes and considered using nuclear weapons in space. So the idea is not new. It was just rejected as reckless and dangerous for a variety of good reasons. Making space unusable is one. Leaving nuclear weapons in orbit – unprotected and out of positive human control and potentially liable to uncontrolled reentry – are two more. So why would Russia return to this really dangerous idea now? There are at least three explanations that have some credibility (and possibly more as some of my colleagues have pointed out). Explanation 1: Go After American Power Asymmetrically The first plausible explanation is that in the 2000s, as Russia’s conventional military was weak and being rehabilitated, Vladimir Putin threw a lot of money at the Russia nuclear complex to come up with programs that could undermine America’s advantages. This funding led to a number of very unorthodox nuclear programs including the now famous Poseidon long-range, underwater nuclear-armed torpedo and the Skyfall, a nuclear-powered, nuclear-tipped cruise missile that can fly for days and attack its targets from unexpected angles. Both of these programs were conceived of decades ago, but did not get fully funded or deployed during the Cold War. When the USSR collapsed, these programs all withered. Both novel systems have found new support under Putin, who has touted them in multiple speeches. The as-yet unnamed nuclear-armed satellite killer (How about Starburst for a name?) could be another such device, brought back to life from the Soviet archives to go after American power asymmetrically. As America relies heavily on space for military operations, countering it could make it easier for Russia to go toe to toe with the west in a conflict. It could be that this program was mothballed when the USSR collapsed but rehabilitated when new money was available, and details were only available recently in the later stages of development. Thus, it should not be assumed that there is a clear use strategy or specific scenario in mind behind the weapon. Both Moscow and Washington (and now some speculate China as well with its own nuclear expansion) have long histories of pursuing nuclear programs because they could, and then figuring out how to use them later. Explanation 2: Nuclear “Insurance Policies” A second motive is less benign than just technical and financial opportunity, and would involve Russia explicitly seeking programs and capabilities that could go after American nuclear control capabilities in a crisis to prevent America from attacking Russia first. This could be considered consistent with Russia’s stated but dangerously provocative “escalate to de-escalate strategy.” Russia’s fear is also likely behind the Poseidon and Skyfall, since both of these systems are more fittingly thought of as retaliatory, and not first strike weapons. Neither move fast enough to disarm the U.S. and are mainly good for firing after an attack. Thus, many in Russia likely consider them nuclear insurance policies; if Washington ever decided to pursue a disarming first strike made up of American conventional and nuclear assets, and backed by U.S. missile defenses (known in Russia as the splendid strike threat) enough Russian nuclear weapons would survive to destroy America, keeping deterrence intact. It is hard, and actually morally offensive, to have sympathy for Vladimir Putin, but there is a long history of fear as a motive and a sense of encirclement that permeates his regime. Thus, many of these nuclear programs – including the new nuclear armed space system – could be seen in this light. If this is an explanation for other novel nuclear systems, then it could also be part of the motive for the new space/nuclear option. Explanation 3: Put America’s Technical Advantages At Risk The third motive is one that probably resonates with most observers of Putin’s long and brutal time in office, marked by political assassinations and repression at home and multiple wars abroad. This possible motive is one where Putin is investing in capabilities that could cripple America in a run up to a direct conflict with Moscow. Being able to detonate a nuclear weapon in space and damage, if not destroy America’s extensive constellations of military satellites could be seen by Russia as both useful and even necessary to prepare for a possible conflict with the west and America. Its threatened use could be used to try and force America to back down in a crisis, or even used preemptively as a prelude to a major military move by Putin against NATO or America itself. As a weapon of aggression, a space-based device could put America’s considerable technical advantages at risk, thus explaining why some have expressed concern about America’s urgent need to upgrade its command and control systems and improve its resilience in space launch and satellite systems. Interestingly, in the move and counter-move process of deterrence and warfare, America’s investment in smaller, resilient constellations of satellites may have increased Russia’s interest in systems that can disable large numbers of assets as opposed to direct assent, kinetic anti-satellite weapons. So why is Russia pursuing such a program? The bottom line is we don’t really know. Despite spending $50 billion a year on nuclear weapons, $900 billion on defense broadly, and $70 billion on intelligence, we don’t have as much insight into Russia’s nuclear doctrine or Putin’s inner thinking as we might want. All three of the motives laid out above are plausible; it’s also possible that a combination of the three are driving the Russian leader. We may never know. Still, an important question remains regarding what the U.S. should do in response. Legally and morally, the U.S. and its allies should call out any such illegal and dangerous effort for what it is – madness. Detonating a nuclear weapon in space would not only damage U.S. assets but those of all countries, including Russia (China, India etc). It would set back the use of space for multiple purposes – peaceful and otherwise – by decades. The Russia space program puts even greater emphasis on the need for America to insulate its space assets, diversify its systems to deal with space attacks, and develop more resilient space capabilities including through rapid relaunch abilities. In a conflict, demonstrating that the U.S. can quickly launch and replace critical space-based assets may be one way to deter Russia from ever using such a crazy and dangerous device. If doing so provides no material advantage, the need or urge to use it goes way down. Such resiliency requires considerable investment and U.S. leaders should also be mindful of an overreliance on private space launch capabilities, which while important cannot replace the Government’s own ability to protect American assets. However this resiliency is developed – it will be expensive. But consider the money the U.S. is investing in redundant and arguably unnecessary nuclear overkill – including the new nuclear land based intercontinental ballistic missile that has now ballooned from an estimated $62B in 2015 to over $130 billion, a number which may still be climbing. Perhaps redirecting some of that nuclear funding to more urgent and useful priorities would be a better investment.

#### Even if mutually assured destruction prevents a first strike, command and control infrastructure failure is the most likely scenario for nuclear escalation

**Taylor 22 - Jeffrey Taylor, Marine Corps University, 2022** “Deterring Russian Nuclear Threats with Low-Yield Nukes May Encourage Limited Nuclear War” [https://www.usmcu.edu/Outreach/Marine-Corps-University-Press/MCU-Journal/Journal-of-Advanced-Military-Studies-SI-2022/Deterring-Russian-Nuclear-Threats-with-Low-Yield-Nukes-May-Encourage-Limited-Nuclear-War/] Accessed 9/18/23 SAO

**With nuclear threat perceptions high, an accident or miscalculation leading to conventional conflict could escalate quickly to the nuclear-use** threshold. As noted by Arbatov, **most nuclear-related crises are** not **based on** aggression but **misunderstandings that spiral out of control.**88 The reduction in strategic communication that has accompanied recent breakdowns in arms control agreements has left American and Russian defense planners and policy makers to interpret opposing nuclear doctrines from their own perspective. As shown in this article, this has led both countries to perceive each other’s nuclear policies as aggressive and threatening. Former NATO deputy supreme allied commander Sir Richard Shirreff recently warned that, in the current geopolitical climate, a miscalculation between NATO or Russia would likely lead to nuclear conflict.89 A possible catalyst for military conflict between Russia and the United States/NATO could be an accident caused by a military drill or a misinterpretation of a military exercise. Both NATO and Russia regularly engage in large-scale military drills near the Russian border in Eastern Europe.90 Russia has characterized NATO drills as provocative.91 Citing concerns about NATO expansion, Russia recently declined to modernize the 2011 Vienna Document, which mandates confidence-building measures designed to prevent accidental or inadvertent escalation of military exercises.92 The close proximity of recent NATO and Russian military exercises has raised concerns among analysts that an accident or inadvertent collision could occur and lead to escalation.93 A military exercise could also be perceived as preparation for an impending attack, as was the case for Russia’s 2008 Kavkaz exercise, which preceded Russia’s invasion of Georgia, or Russia’s recent troop buildup on the Ukrainian border, which Russia claimed was a military exercise but was viewed in the West as a possible precursor to military aggression.94 The potential danger of misreading military drills is highlighted by the Able Archer incident in 1983, when Soviet intelligence misinterpreted a NATO command post exercise as preparation for a nuclear strike, and Soviet nuclear forces were placed on high alert.95 The risk of inadvertent escalation is complicated by the growing prevalence of weapons, air platforms, and command and control infrastructure that can serve in both nuclear and conventional roles. These dual-capable systems Taylor 219 Strategic Culture increase the risk that a conventional attack may be perceived as nuclear.96 The Russian nuclear arsenal includes many weapons platforms that can be armed with both conventional and nuclear warheads. These weapons are often stored at the same facilities that house strategic and tactical nuclear weapons. Moreover, the United States increasingly relies on dual-capable command and control infrastructure, including targeting satellites and early-warning satellites for both conventional and nuclear operations. Should a conflict occur, this weapon and infrastructure ambiguity, combined with heightened nuclear threat perceptions and mutual launch on warning nuclear postures, provides a variety of potential pathways to escalation. For example, during early phases of a conflict, the United States may employ precision-guided munitions or aerospace assets to conduct strikes on Russian dual-use missile facilities to challenge Russia’s conventional capability or command and control infrastructure to complicate military operations. To Russian officials, who fear that the United States is preparing for nuclear warfighting, such an attack may be perceived as a counterforce strike targeting nuclear assets, prompting a nuclear response, as provided by Russian doctrine. Alternatively, fearing an aerospace attack or large-scale military incursion backed by nuclear weapons, Russia may choose to operationalize escalation management principles with conventional strikes on critical infrastructure using dual-capable weapons. In such a scenario, the United States may misinterpret the incoming missile as nuclear and respond with a nuclear strike, or, if the strikes targeted command and control infrastructure, the United States may respond with nuclear weapons, as provided by American nuclear doctrine. Due to heightened threat perceptions and challenges due to entanglement, nearly any missile attack on U.S. or Russian infrastructure could be misinterpreted and trigger a nuclear response. Each of the pathways to escalation described above involves a misunderstanding or miscalculation that could be alleviated by implementing proper resilience measures to strengthen the material and human governance systems involved in preserving nuclear deterrence between the United States and Russia. The remaining sections discuss a few specific areas in which action can be taken to enhance the resilience of the U.S./Russia deterrence framework to prevent and manage escalation to nuclear war. Effective Resilience Measures Address Both Nuclear Aggression and Inadvertent Escalation A resilient American approach to deterrence vis-à-vis Russia requires a balance in capabilities and doctrines to prevent nuclear aggression and measures that mitigate the threat of inadvertent escalation. The main resilience goal of deterrence is to achieve resistance—or prevent the threat of nuclear war altogether. As discussed previously, the current U.S. approach to achieving resistance is primarily focused on deterring Russian nuclear aggression by deploying new low-yield nuclear weapons in Europe. While this tactic has a high probability for success in deterring Russian aggression, it also comes with high risk and cost.97 Some of this risk is tied to the growing danger of unintended escalation. To mitigate these risks, deterrence policies must include measures to prevent misunderstandings and misinterpretations by the United States or Russia that could lead to inadvertent escalation while maintaining capabilities and policies that deter Russian aggression. The following sections present a series of measures aimed at improving resilience in the U.S./Russia deterrence framework by promoting alignment between the human governance systems charged with developing and executing American and Russian nuclear policies while increasing redundancy and diversity in material systems that are critical for accurate detection and characterization of nuclear threats. Because declaratory policy generally changes very little year to year, and nuclear weapons typically require heavy investments of time and money, the considerations presented in these sections largely focus on alternative, and arguably more accessible, avenues to build resilience in the deterrence framework and complement official U.S. doctrine and weapons capability.98 Prevention of Inadvertent Escalation Requires Effective Communication and Understanding of Intent Because deterrence, by definition, is primarily a psychological state, effective and resilient deterrence requires that intent be clearly communicated, understood, and acknowledged by the party to which deterrence measures are intended.99 As indicated previously, it appears many of the factors contributing to the current threat of nuclear escalation between the United States and Russia are based on misalignment in threat perceptions and interpretations of intent. As geopolitical situations continue to evolve, it is likely that this misalignment, along with the associated threat of nuclear escalation, will continue to increase unless a consistent and reliable system of strategic communication between the two nations can be established. In recent years, many of the primary communication channels between Russian and U.S. strategic communities have been strained or broken**. In the absence of communication with Russia, American officials and defense planners are unlikely to correctly interpret** Russian intent **or** effectively **communicate** U.S. **intent in all scenarios**. As Gray notes, “A theory of deterrence may score a ‘perfect 10’ for elegance and persuasiveness to us. But, if it rests upon false assumptions about intended deterrees, the theory will be worse than useless.”100 Establishing regular opportunities for communication could provide U.S. officials with a forum to both communicate intent and better understand Russian intent to inform the development of tailored deterrence policies that anticipate and address unintended consequences that may lead to escalation. Because miscommunication is likely to lead to miscalculation and unintended escalation, both sides in such a forum would have significant incentive to communicate accurately and clearly. **Reliable channels of communication can** also **add redundancy and diversity within the deterrence framework** by facilitating the establishment of diplomatic channels for conflict resolution and crisis management. Because the threat of nuclear escalation between the United States and Russia is most acute in Europe, it is prudent for the United States to engage additional NATO members in these communications with Russia. One possible opportunity to rebuild communication avenues with Russia is to resurrect arms-control discussions. Since the Soviet era, arms-control agreements have been the backbone of efforts to reduce nuclear risk between the United States, NATO, and Russia. Arms-control discussions provided regular opportunities for realignment on issues regarding nuclear posture and strategy. However, recent breakdowns in arms-control agreements have challenged this line of communication. Currently, only the New START treaty remains in effect. As a result, Western policy makers and defense planners appear to have lost a significant amount of understanding of Russian intentions.101 Although efforts to resurrect formal arms-control agreements are likely to be initially met with resistance in both Russia and the United States, these efforts at least will signal American resolve to address the growing risk of nuclear escalation. Moreover, in the absence of formal arms-control discussions, the president could attempt to establish informal talks for the same purpose. Another possible opportunity for strategic communication could come from joint conferences and fora to discuss modern strategic challenges facing both Russia and the United States/NATO. Although these venues would likely not permit in-depth talks about specific tenets of nuclear doctrine, they could provide both countries greater insight into the other’s strategic and cultural thought processes and threat perceptions to facilitate the creation of defense policies that are better tailored to avoid miscalculation. Opening these meetings to both military and civilian participants could strengthen informal ties between each country’s strategic communities. This model could also be expanded to include additional nuclear states. It is possible that efforts to establish strategic communication may be met with some functional limitations. One of the primary challenges is that the idea of resurrecting arms-control agreements does not appear to be very popular in Russia today. Arbatov notes that arms-control agreements are seen by the current Russian political elite as “unilateral concessions to the West.”102 In the past, efforts to resurrect arms control have also been challenged by unacceptable demands and an unwillingness to compromise. Moreover, in today’s political environment, some within the United States may see efforts at establishing strategic communication channels with Russia as weakness and put domestic pressures on the president to take a tougher stance toward its government. Even the most robust lines of communication will not enhance resilience if U.S. policy makers are not willing to come to terms with an accurate accounting of the Russian perspective. Because Russian threat perceptions are often inconsistent, sometimes contradictory, or seem unduly paranoid, many American policy makers discount them or reject them altogether.103 However, as Adamsky notes, “Representing reality as it is seen from Moscow is essential in order to explain the perceptions driving Russian strategic behavior, even if this analytical disposition and Russian perception may sound counterintuitive, confusing, and contradictory.”104 Redundancy and Diversity in Command and Control Infrastructure Mitigates Risks of Miscalculation A reliable system for mitigating the risk of inadvertent escalation also requires redundant infrastructure and protocols for detecting, identifying, and responding to potential nuclear threats. The United States is currently working to improve its space-based infrastructure for detecting and tracking missiles. However, the current system for detecting missile launches currently includes only five satellites, each of which carries a large suite of critical sensors.105 The relatively large size and relatively small number of these satellites could make them vulnerable to attempts by Russia or other adversarial powers to disable U.S. command and control infrastructure in a conventional or nuclear conflict. This risk could be mitigated by distributing some of the sensors and functions of these systems on a larger number of smaller satellites. By distributing the function among several satellites, the loss of one satellite is less likely to cripple the entire system, and it could be more easily replaced than the existing satellites in the array. It may also preserve a sufficient level of critical nuclear command and control functions, the loss of which could trigger a nuclear response. In addition to technical redundancy and diversity, maintaining a robust command and control infrastructure requires sustained support from policy makers. A recent study by the Center for Strategic and International Studies indicates that funding for the U.S. command and control system lacks adequate political advocacy and support.106 Because it is relatively expensive and tied to other nuclear-related policies, the command and control system is often politicized, subjecting it to intense debate and sometimes fierce opposition. Maintaining adequate support to sustain functionality and ongoing upgrades of command and control infrastructure will therefore require greater alignment among policy makers and agreement as to its criticality in preventing inadvertent nuclear escalation.

#### Russia is using its permeant member status to block space nuke bans

**Al Jazeera 24 - Al Jazeera Staff, March 21st 2024** “Why are the US and Japan pushing to ban nuclear weapons in space?” [https://www.aljazeera.com/news/2024/3/21/why-us-and-japan-are-pushing-to-ban-nuclear-weapons-in-space] Accessed 3/25/24 SAO

The US and Japan on Monday proposed a United Nations Security Council resolution calling on countries not to deploy or develop any kind of nuclear weapons in space. The draft resolution did not directly name Russia, but the move comes days after a US intelligence assessment said Moscow’s antisatellite weapons posed a threat to US space capabilities. Washington fears space detonations could result in the disruption of US military satellite communications. Last month, the administration of US President Joe Biden claimed that Moscow was creating an space weapon designed to target US satellites. Russian President Vladimir Putin and Defence Minister Sergei Shoigu have denied developing such a weapon. “We have always been categorically against and are now against the deployment of nuclear weapons in space,” Putin said last month. “We are doing in space only what other countries have, including the United States.” On Wednesday, Russia warned the United States against using commercial satellites for spying after reports that Elon Musk’s company SpaceX had inked a deal with a US intelligence agency to build a network of spy satellites. Such systems, Russian Foreign Ministry Spokeswoman Maria Zakharova said, could “become a legitimate target for retaliatory measures”. Who said what at the UN Security Council meeting? “Any placement of nuclear weapons into orbit around the Earth would be unprecedented, dangerous and unacceptable,” US Ambassador to the UN Linda Thomas-Greenfield said on Monday. Invoking the Oscar-winning film Oppenheimer on Monday, UN Secretary-General Antonio Guterres said “humanity cannot survive a sequel to Oppenheimer”. “[Countries] should not develop nuclear weapons or any other kinds of weapons of mass destruction designed to be placed in orbit,” the UN chief said during his speech at the United Nations Security Council, expressing his concerns about the nuclearisation of space. Japan’s Foreign Minister Yoko Kamikawa, who chaired the council meeting, said: “During the Cold War, despite the confrontational environment at that time, the international community established legal frameworks to ensure the peaceful and sustainable use of outer space, which prohibit placing nuclear weapons or any other kinds of weapons of mass destruction in outer space.” What are space weapons? What are laws/treaties to regulate them? Antisatellite weapons, commonly referred to as ASATs, are weapons used to interfere with other satellites. Satellites may be destroyed or rendered inoperable through a variety of methods, including physical destruction – crashing a satellite into another satellite or non-kinetic attacks like electromagnetic jamming, lasers or cyberattacks. Space-based weapons designed to target either space or ground targets may include ballistic missile defence interceptors and ground-attack weapons. They typically fall into three categories, Earth-to-space, space-to-space, and space-to-Earth. The Partial Test Ban Treaty (PTBT), formally known as the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, prohibits nuclear detonations in outer space and underwater environments. This was initially ratified by the US, Russia (formerly USSR) and the UK. Article IV of the 1967 Outer Space Treaty joined by 114 countries, bans weapons of mass destruction (WMD) in outer space, including testing and deployment. At the present moment the United States, Russia, India and China have developed some form of antisatellite weaponry. On November 15, 2021, Russia launched an antisatellite (ASAT) test hitting a Russian satellite and creating more than 1,500 pieces of orbital debris. What does the US intelligence assessment say about Russia’s space weapons? A US intelligence annual threat assessment [PDF] report released last week said Russian space weapons pose a serious threat to US national security. “Russia continues to train its military space elements and field new antisatellite weapons to disrupt and degrade US and allied space capabilities. It is expanding its arsenal of jamming systems, directed energy weapons, on-orbit counter-space capabilities, and ground-based ASAT missiles that are designed to target US and allied satellites,” it said. The annual intelligence assessment also highlighted threats from China, Iran and North Korea. The US Defense Intelligence Agency wrote in February 2019 report that Russia and China “are developing jamming and cyberspace capabilities, directed energy weapons, on-orbit capabilities, and ground-based anti-satellite missiles that can achieve a range of reversible to non-reversible effects”. In addition, the Senate Intelligence Committee held a hearing on March 11 where the head of the key US intelligence agencies gave their congressional testimony. Committee chair Senator Mark Warner raised his concerns in the opening of the hearing regarding space weapons: “We are now even seeing the possibility of foreign adversaries weaponising space in ways that could be massively destructive not only to our national security but to our way of life.” In 2019, President Donad Trump launched the US space command to counter looming threats to the United States’s space-based infrastructure. At present, there are no known operational orbital weapons systems, though several nations have implemented orbital surveillance networks to monitor other nations or military forces. Will the resolution pass at the UN? Given Russia’s veto power at the Security Council, it is unclear whether the draft resolution would pass. First Deputy Permanent Representative of Russia to the UN, Dmitry Polyansky, denounced the resolution proposed by the US and Japan as “just another propaganda stunt by Washington” and “divorced from reality”. “Any interaction will only be possible if the United States and NATO review their anti-Russian course, and when they show that they are ready to participate in comprehensive dialogue, taking into account all of those strategic stability factors and removing all of the concerns that we have about our security,” he said.

#### Nuke winter causes extinction

**Van der Meer 19:** Sico van der Meer: Drs. Sico van der Meer is a Research Fellow at the Clingendael Institute. His research is focussing on non-conventional weapons like Weapons of Mass Destruction and cyber weapons from a strategic policy perspective. He graduated from the Radboud University Nijmegen in 1999 with a Master’s in History. Before joining the Clingendael Institute, he worked as a journalist and as a Fellow of a think tank on civil-military relations. In 2016 he was seconded to the Taskforce International Cyber Policies of the Netherlands Ministry of Foreign Affairs. “NUCLEAR ARMS CONTROL: THE END OF AN ERA?” [https://spectator.clingendael.org/en/publication/nuclear-arms-control-end-era] NPR recut ahs//emi

Arms control appears to be in a state of crisis. This Clingendael Spectator series explores the different dimensions of this global challenge. In the second episode: the return of nuclear weapons in international politics. Investments in arsenals have increased, rhetoric on nuclear weapons returned and arms control agreements are in trouble. Is nuclear war becoming an actual option? While nuclear weapons may have disappeared from the attention of the general public after the end of the Cold War, they kept playing an important role in international relations. In the last few years they re-entered the spotlights: all nuclear-armed states are investing enormous amounts of money in modernising and expanding their arsenals, various nuclear arms control agreements are abandoned or under pressure and nuclear weapons are even back in political rhetoric by world leaders. What is happening? Weapons not for use Only two nuclear weapons have ever been used in war: the bombs destroying the Japanese cities of Hiroshima and Nagasaki in 1945. Those two rather primitive nuclear bombs killed approximately 105,000 people immediately and many more people died later due to injuries.[1] Even today, survivors and their descendants suffer from health problems caused by the radiation released by the bombs. Simplified, the fact that nuclear weapons have not been used in warfare after 1945 has two reasons. Firstly, nuclear weapons proved to be so destructive that only threatening to use them was enough to make them effective policy tools. Attacks from other states could be deterred just by having the ability to use nuclear weapons, since any attack could result in a nuclear counter-attack which the attacking state would not survive. Next to this practical consideration, there is also an ethical aspect: nuclear weapons are generally considered to be too horrible to be used because of their humanitarian consequences. Apart from the potentially huge number of victims in nuclear war, the radiological fall-out causes long-term health consequences for survivors and their descendants. Moreover, climate scientists warn for serious climate problems resulting from nuclear war. The so-called ‘nuclear winter’ effect causes a drop in global temperature because ash and soot in the atmosphere would block the sunlight.[2] In case of a relatively limited nuclear war, this effect may already cause famine all over the world, and in case of a large-scale nuclear war it **may** even **extinct humankind**.[3] A recent scenario by Princeton University showed that a conflict between the US and Russia escalating to nuclear weapon use could cause more than 90 million people dead and injured within only the first few hours of the conflict.[4] Successes in arms control Soon after the bombings of Hiroshima and Nagasaki, politicians in many countries started urging for international agreements to prevent the production and use of nuclear weapons. This led to many decades of nuclear arms control negotiations with many impressive results. To mention only a few successes: Non-Proliferation Treaty The Non-Proliferation Treaty (NPT), dating from 1968, prohibits states from obtaining nuclear weapons. The five states that had already developed nuclear weapons by 1968 - the United States, the So iet Union, China, the United Kingdom and France - promised in the treaty to work towards elimination of their stockpiles. The treaty is very effective: it almost halted the proliferation of nuclear weapons over the world. After 1968 only five more states developed nuclear weapons: Israel, South Africa, India, Pakistan, and North Korea (South Africa dismantled its nuclear weapons in 1989). Comprehensive Test Ban Treaty The Comprehensive Test Ban Treaty (CTBT), dating from 1996, preceded by the Partial Test Ban Treaty (PTBT) of 1963, prohibits nuclear test explosions. Even though the treaty did not yet enter into force because some required ratifications are missing, it effectively set a broadly supported norm against nuclear testing. Bilateral arms control agreements Various bilateral arms control agreements between the US and the Soviet Union (and later Russia) were highly successful as well. Being by far the largest possessors of nuclear weapons (together these two states possess more than 90 percent of all nuclear weapons), agreements among them had a huge influence. Especially the series of treaties limiting the maximum number of deployed nuclear weapons in both countries caused the total number of nuclear weapons in the world to drop from almost 70,000 in the 1980s to some 15,000 nowadays.[5] The latest treaty in this series is New START, signed in 2010. The US and the Soviet Union also negotiated agreements on banning specific types of nuclear weapons or related systems, such as anti-ballistic missile systems in the Anti-Ballistic Missile (ABM) Treaty of 1972 and ground-launched intermediate-range missiles in the Intermediate-Range Nuclear Forces (INF) Treaty of 1987. Declining public attention For many years after the end of the Cold War, the risk of nuclear weapons seemed to be taken care of and faded from public attention. The various arms control agreements did their work, the number of nuclear arms decreased and almost no-one talked about using them anymore. Yet, something went wrong. The trend of decreasing numbers slowed down and nuclear deterrence continued to be a keystone of defence policies in the nuclear armed states and their allies. Moreover, of the five states that developed nuclear weapons after the NPT came into existence, three tested their first nuclear bombs several years after the end of the Cold War: India and Pakistan in 1998, North Korea in 2009. It is hard to pinpoint when the first clear cracks in the nuclear arms control system appeared. It may well have been the unilateral US withdrawal from the ABM Treaty in 2002, or maybe the enlargement of NATO in the late 1990s, which increased distrust in Russia about the intentions of the US and its European allies. Even though nuclear disarmament ideas got some new boost when President Barack Obama entered the White House in 2009, in practice he achieved very little. Trillions of dollars Slow and (for most people) hardly visible developments brought us to the current situation: all nine nuclear armed states are investing heavily in modernising and/or increasing their nuclear arsenals and related delivery systems, such as missiles.[6] The US modernisation programme alone is already estimated to cost between 1.2 and 1.5 trillion US dollars.[7] Some investments, for example in low-yield nuclear weapons and cruise missiles with nuclear warheads, are dangerously lowering the threshold for use as well as blurring the line between conventional and nuclear weapons. This may more easily lead to nuclear war because of misperceptions. Moreover, nuclear weapons are back in political rhetoric: leaders of nuclear armed states are openly boasting about their arsenals and threatening to use them.[8] Combined with other geopolitical developments, such as the Russian annexation of the Crimea and support of armed rebels in eastern Ukraine, tensions in the international strategic environment increased even further. While tensions grew, trust in nuclear arms agreements dropped. Arms control under stress In 2018 the US withdrew unilaterally from the nuclear deal with Iran (officially: the Joint Comprehensive Plan of Action, or JCPOA). President Donald Trump stated it was “a horrible, one-sided deal that should have never, ever been made”, especially because it still allowed Iran a residual (though very restricted) nuclear programme and did not include limits on Iran’s “other malign behaviour.”[9] The US withdrawal came only after Iran had significantly downscaled its nuclear programme and was in full compliance with the deal. This is why the US withdrawal is expected to have a long-time negative influence on any diplomatic arms control and non-proliferation negotiations: many states will doubt whether they could trust any promise by the US. In 2019 both the US and Russia withdrew from the INF Treaty after accusing each other of violating it. The unwillingness of both sides to save the treaty was a clear show of distrust. Especially Europe, which is in the direct range of the missiles that were prohibited under the INF Treaty, expressed worries about its demise The US signalled that a new agreement on some categories of (nuclear) missiles could be negotiated, but only if China would be involved. Yet, China reiterated that it would only join any nuclear weapons-related negotiations after the US and Russia would have reduced their nuclear arsenals significantly; while China has some 290 nuclear weapons, the US and Russia possess more than 6000 each.[10] Meanwhile, the New START Treaty is due to expire in February 2021. Russia has expressed a wish to extend or renew the treaty several times, but so far the US has been reluctant to engage in any serious talks on the issue. Many experts fear that New START will not be extended or succeeded, which means that both the US and Russia are free to deploy as many nuclear weapons as they wish.[11] This risks a new Cold War style arms race including increased instability and dangerous escalation potential. Also in 2019, the US accused Russia of violating the CTBT by secretly conducting limited nuclear weapon testing. Even though the CTBT did never enter into force - one of the main reasons being the US’ unwillingness to ratify the treaty - this non-substantiated accusation could damage trust in the CTBT and sour US-Russian relations even more. Cornerstone under pressure In the meantime, the NPT, often called ‘the cornerstone of the global non-proliferation regime’, also faces increasing criticism. For several years, many non-nuclear armed states complain about the lack of nuclear disarmament by the five nuclear armed NPT-member states, who in Article 6 of the treaty promised to “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”[12] The investments and rhetoric described above are only fuelling this frustration further. The 2015 NPT Review Conference failed to reach any consensus document. The prospects for the next Review Conference in 2020 are not very optimistic either, and another disappointment bears the risk of decreasing the international support for this key treaty.[13] In 2017 a new treaty against nuclear weapons was established: the Treaty on the Prohibition of Nuclear Weapons (TPNW). This treaty, which does not just prohibit the production of nuclear weapons like the NPT, but also the possession and use of them, causes some polarisation among states.[14] Some consider the treaty as a much needed strengthening of the nuclear taboo, others see it as undermining the NPT because it lacks verification mechanisms and distracts states from the important yet complicated work in the NPT context. Especially the non-involvement of any of the nuclear-armed states causes criticism that the treaty is not contributing to actual disarmament. Yet, the fact that the TPNW movement creates much attention for the nuclear weapons issue outside the small circle of ‘usual suspects’ deserves merit. New times, new agreements? Why is nuclear arms control, after decades of success, currently under pressure? Increasing distrust among key states may be the most important factor. Yet, the changing geopolitical environment in general plays a role as well: instead of the bipolar Cold War environment (US versus Soviet Union) and the almost unipolar situation in the years after the end of the Cold War, the trend is now towards a multipolar world in which more states gain big power status – think only of China’s rising star. Similarly, more states are investing in nuclear weapons and their delivery systems than before as well. At the same time, new technological developments may make arms control agreements dating from the Cold War era look outdated. Those old agreements did not take into account modern technologies such as hypersonic missiles, artificial intelligence, space weapons and cyber threats. These developments may make modernized arms control agreements desirable. Risk of nuclear escalation Whatever the exact reason behind the decreasing trust in nuclear arms control may be, the demise of agreements and the lack of negotiations to replace them is certainly a worrying development. Arms control is not an ideological issue, but a security issue. Arms control agreements aim to prevent arms races, instability and escalation, which in the end benefits all parties involved, nuclear-armed or not. Especially with regard to nuclear weapons, a continuing demise of trust in arms control is even more risky. Even though currently only nine states possess nuclear weapons, a lowering nuclear threshold and an increasing risk of nuclear escalation may seriously affect the rest of the world as well. Even though the moral taboo on actually using nuclear weapons may still be strong, the increasing investments in nuclear weapons, the re-emerging political rhetoric about them and the continuing demise of nuclear arms control agreements show that one cannot exclude that nuclear war may become an actual option at some moment. To keep their nuclear deterrence credible, the nuclear-armed states have to show that they are ready to use their nuclear weapons at any desired moment. Especially in times of crisis and quickly escalating tensions, miscommunication and misperceptions (or outright failures by humans or machines) could create a situation in which a conflict may escalate to a nuclear level without anyone actually aiming for that. Unfortunately there are already many examples in history of ‘near misses’ in which nuclear weapons were almost used.[15] Optimism Yet, there is still some room for optimism. Some nuclear arms control agreements are still in place, including the most important one of all, the NPT. Attention among policy makers and the broader public for the issue is increasing all over the world, not least because the climate change caused by any nuclear war fits in the global worries about climate change in general. Even though the political-military threshold for nuclear weapons use may be lowering, the moral taboo to do so is still strong. Yet, to prevent nuclear weapons to be used, on purpose or by mistake, new initiatives to rescue and renew nuclear arms control can only be welcomed.

#### Nukes in space cause extinction through first strikes and cascading debris fields that lock humans out of space

**Torbet 24 - Georgina Torbet, The Verge, March 19, 2024** “Nuclear weapons in space are bad news for the entire planet ‘The old fear has come back.’” [https://www.theverge.com/2024/3/19/24104979/nuclear-weapons-space-russia-putin-satellite-debris-orbit] Accessed 3/25/24 SAO

Last month, several news outlets reported that Russia could be planning to deploy a space-based nuclear weapon, alarming, well, pretty much everyone. US policy hawks, space environmentalists, and anyone with a lingering memory of Cold War-era fears over nuclear annihilation were all sounding the alarm about the threat posed by a Russian nuke in space. As scary as the prospects sound, the US government has assured people that the weapon doesn’t necessarily pose a threat to people on the ground. Instead, it would target other objects in space, like the satellites used by the US military for communications and other operations. But that struck some as cold comfort, especially given Russian President Vladimir Putin’s unpredictability. And Putin has indicated that putting a nuclear power unit in space is a priority for the country. In the long term, defense experts warn that having a nuclear weapon positioned in space could pose **a threat to life on Earth** by eroding international relations and space law. From clouds of space debris that could cut off access to space to the development of weapons that could launch from space to hit targets on the ground, space-based nukes have the potential to impact everything — and everyone. Anti-satellite weapons already exist — but not nuclear ones No country has ever used an anti-satellite weapon against another country, but several countries have destroyed their own satellites in demonstrations of their military capabilities — including the US, Russia, China, and India. These tests are not without controversy: a 2021 Russian test of an anti-satellite weapon, for example, drew condemnation from NASA for creating debris that threatened astronauts on the International Space Station (including Russian cosmonauts). Since then, a UN panel has called for a ban on the testing of such weapons and several European Union nations and the US have pledged not to perform destructive tests. A nuclear weapon in space would cause much more destruction than previous anti-satellite weapons tests, explained Andrew Reddie of the Berkeley Risk and Security Lab, as existing space-based weapons typically destroy just one satellite at a time. In the age of huge satellite constellations such as Starlink, knocking out a single satellite is more of an annoyance than a major threat. To destroy satellites at scale, you need a different weapon, such as a directed energy weapon based on the ground. Or, you could use a nuclear weapon in space, which creates not only shock effects but also heat, radiation, and an electromagnetic pulse — giving it the ability to take out or impair entire networks. International laws protecting space The best response the international community has had to date in restricting the stockpiling and use of nuclear weapons is international law. When it comes to space, the key piece of legislation is the Outer Space Treaty of 1967, of which Article IV prohibits placing nuclear weapons or other weapons of mass destruction in orbit. Detonating a weapon in space would be unprecedented and could run afoul of international rules barring the use of indiscriminate weapons on civilians or civilian objects. “It seems to be that any kind of destruction of something in space is an indiscriminate weapon, and indiscriminate weapons are prohibited, and the use of indiscriminate weapons are a war crime,” said Christopher Johnson, professor of law at Georgetown University. However, this assumes that satellites are being destroyed by a kinetic impact. It might be possible to disable or jam satellites in another way, such as using an electromagnetic pulse, or EMP. Some reports have suggested that Russia is developing an EMP anti-satellite weapon rather than a nuclear one. If that could be done in a way that doesn’t create a debris field, that may not contravene the international law because it would no longer be a weapon of mass destruction or indiscriminate in its effects. With the current situation, “We don’t know what is being threatened,” Johnson said and pointed out that the details matter a lot here and that Russia is capable of a very close reading of the relevant laws to stay within them. The cascading debris problem The reason that the use of weapons in space could be considered indiscriminate is because of the debris field they create. Destruction of objects in space creates large pieces of debris, which are hazardous but relatively easy to track. Where it gets dangerous is the increasing number of medium and small pieces of debris, which are too small to be trackable but are still traveling at high enough speeds to do tremendous damage to other objects or even people in space. “A fleck of paint the size of your thumbnail can go through most spacecraft. Traveling at a very high velocity — 18,000 mph — it’ll go right through it,” said space debris expert Vishnu Reddy of the University of Arizona. A serious collision in orbit could create a field of small debris pieces that would quickly collide with other satellites, creating a cascade. At a critical mass, each collision creates more debris, which creates more collisions, which creates more debris, until an entire orbit becomes difficult or impossible to access. This scenario, known as the Kessler syndrome, could cut off access to space for generations: from making rocket launches more difficult, dangerous, and expensive to, at worst, making any kind of space travel completely impossible for decades and shutting humanity off from the stars. This concept of the syndrome was first proposed in the late 1970s, when there were optimistic predictions that the Space Shuttle might fly as often as once per week. That never came to fruition, so in the intervening decades, there was less concern about the possibility of a cascading debris event. But now, with the pace of both government and private launches ramping up to the highest levels ever, space debris is once again on everyone’s radar, Reddy said: “The old fear has come back.” Vulnerable orbits The most useful orbits around the planet are getting increasingly crowded, and even if humanity stopped launching things into space tomorrow, the debris already in orbit would continue to collide and make the problem worse. Over the long term, if this problem isn’t addressed, it could spiral into a Kessler syndrome, as the situation can go from bad to catastrophic quickly. “The timeline for the cascading collisional scenario is very short,” Reddy said. “We’re talking anywhere from hours to days to weeks, not months to years to decades.” The use of a nuclear weapon in orbit, depending on its size and in which orbit it is detonated, could kick off such a cascading scenario. But this isn’t exclusive to nuclear weapons. It’s possible that a bad actor destroying a single, carefully chosen satellite could create a cascade, Reddy said, if they picked a vulnerable target. In geostationary orbit, for example, there are only so many slots available for satellites in the ring around the Earth’s equator. That makes the slots in high demand, as they are a limited resource. And this scarcity is compounded by the fact that it’s very difficult to remove debris from an orbit so distant, at over 20,000 miles from the Earth’s surface. If these slots are blocked by debris, it could cut off functionality for systems like communications satellites, weather satellites, and navigation satellites. “That would be really, really bad,” Reddy said. “One satellite explosion big enough would be enough to destroy a lot of assets in geostationary orbit.” Fears for the future Although it’s unlikely that any actor would launch a nuclear weapon in space with the specific intention of kicking off a cascading debris effect, it might happen as a consequence of trying to destroy a particular military system. But the debris isn’t the only thing that has experts worried. Security risk expert Andrew Reddie questioned what it would take to convert the technology for a nuclear anti-satellite weapon into a platform that could deploy nuclear weapons from space to targets on the ground. This would require a reentry vehicle, for example, which doesn’t exist yet but could theoretically be constructed based on existing technology. Nukes launched from space would give less warning time than those launched from the surface, threatening thousands or even millions of people. It’s not that the deployment of nukes in space is necessarily likely, with no current indication that Russia is developing such a weapon. But it does show how nuclear weapons in space could shift the geopolitical landscape dramatically and why reports of potential space-based nuclear weapons have drawn such condemnation.

#### Space access is key to combat warming

**Stanley, 20** (our five, 7-10-2020, accessed on 1-24-2022, Morgan Stanley, "Does Earth’s Future Depend on Space? | Morgan Stanley", <https://www.morganstanley.com/ideas/space-earth-sustainability>) AHS//JW Accessed 1/24

How satellite technology and space exploration could be the key to addressing climate change—and could be central to sustainable investing in the coming years. Do humans need to leave the Earth to save it? The concept is far from new. As far back as 1889, the famed novelist and futurist Jules Verne—sometimes called the father of science fiction—flirted with space exploration, climate change and melting polar ice caps in his novel, The Purchase of the North Pole. Since then, pop-culture sci-fi has returned time and again to the idea that humans will eventually need to rely on technology to save their degrading natural environment, a growing subgenre known as “climate fiction” or Cli-Fi. The notion may not be mere fiction. As the new space economy develops, it increasingly overlaps with sustainability in areas such as Earth observation, energy and communications. These developing technologies from both public and private companies may soon become a new avenue for investors interested in pursuing the twin goals of sustainability and investor returns. “Satellite technology and space exploration offer a potential new frontier of opportunities to assess and address climate change and sustainability on a global scale,” says Audrey Choi, Morgan Stanley’s Chief Sustainability Officer and Chief Marketing Officer. “In the coming years, these technologies could enable us to have a have a more powerful global view of climate data and environmental science. Those insights, in turn, can help enable a deeper integration of sustainability considerations into investment decisions.” Related reading RESEARCH Space: Investing in the Final Frontier WEALTH MANAGEMENT Why Advice Matters IDEAS Capital Flows as Space Opens for Business In fact, Morgan Stanley Research believes that sustainability may be one of the more exciting and underappreciated subdomains of the emerging space economy. “Space and sustainability could increasingly align, thanks to innovative applications of satellite technology and the many exabytes of data that space infrastructure will produce over time,” writes Adam Jonas who heads the Space Team at the firm. While increased space exploration could certainly present new sustainability issues—space debris and the potential impact of increased launches on the atmosphere among them—there are many potential benefits emerging from the space theme such as: Food security: Earth observation from satellites helps monitor illegal fishing, improve traceability of products and support predictive models for food supply around the globe. Combining imagery with weather, temperature or air pressure could optimize agricultural yields and help farmers improve efficiency. Greenhouse-gas monitoring: Companies and governments are using satellites and spectroscopy to monitor emissions data, helping to detect CO2 emissions and natural-gas leaks from a range of sources, including oil wells, landfills, industrial operations and farms. Utilities: Satellites are helping utilities optimize renewable energy infrastructure, using predictive models of sunlight and cloud cover to locate solar panel installations and monitoring patterns of energy usage to help balance the load between renewable and nonrenewable generation sources. Satellite thermal signatures also can help utilities and forest-management authorities identify and put out fires faster and more effectively. Access to Renewable Energy: Satellite technology could also enable greater access to renewable energy. “Around 80% of world energy demand is still accounted for by fossil fuels. Growing the amount of clean power is a vital component of the decarbonization of the global economy,” says Jessica Alsford, Head of the Global Sustainability Research Team. “These satellites could help discover remote areas that have ideal solar or wind conditions and create greater amounts of renewable energy sources.” Supply-demand optimization: Satellite data can help monitor the global supply chain, including mining, ground transport, shipping and port activity, as well as activities that create demand, such as building demolitions, construction Internet access for billions of people: The deployment of satellite constellations could bring Web access to three to four billion more people who live in regions where rolling out traditional internet access infrastructure is uneconomical or unfeasible. “A United Nations study found that 52% of the world’s population still lacks access to internet, and 90% of those people are from developing countries,” says Alsford. Research has shown that access to internet use could mean up to a 2.5% difference in a country’s GDP.1 Tertiary benefits: Deep space exploration could offer benefits to adjacent sectors, such as hydrogen fuel cell technology, robotics, propulsion, computer hardware and software, health care, and other disciplines. For example, establishing long-term remote space outposts would require a greater understanding of human physiology in space, not to mention the lack of a natural protective barrier against solar flares, cosmic rays and other radioactively charged particles. The technology for human survival in such an environment could ultimately be applied to cancer prevention and treatment research. Finally, from a data perspective, satellite technology and remote sensing could introduce real-time, high-frequency tracking of relevant environmental data. “Remote sensing via satellites, particularly on a daily basis, could reduce delays in the collection and analysis of key sustainability data points that financial markets increasingly rely on,” says Matthew Slovik, Head of Global Sustainable Finance at Morgan Stanley. Not all environmental or sustainability issues are observable from space, and interpreting the data requires knowledge of asset locations and financial models that haven’t been created to handle satellite data. However, the boom in data collected from space and the associated geospatial analytics could reorient market perspectives on how to approach sustainable finance in the coming years.

#### Warming causes extinction

**Specktor 19 - Brandon Specktor, Live Science, June 4th 2021** “Human Civilization Will Crumble by 2050 If We Don't Stop Climate Change Now, New Paper Claims”[https://www.livescience.com/65633-climate-change-dooms-humans-by-2050.html] Accessed 02/11/21 AHS // AP

It seems every week there's a scary new report about how man-made climate change is going to cause the collapse of the world's ice sheets, result in the extinction of up to [1 million animal species](https://www.livescience.com/65314-human-influence-species-extinction.html) and — if that wasn't bad enough — make our [beer very, very expensive](https://www.livescience.com/63832-climate-change-will-ruin-beer.html). This week, a new policy paper from an Australian think tank claims that those other reports are slightly off; the risks of climate change are actually much, much worse than anyone can imagine. [According to the paper](https://docs.wixstatic.com/ugd/148cb0_b2c0c79dc4344b279bcf2365336ff23b.pdf), climate change poses a "near- to mid-term existential threat to human civilization," and there's a good chance society could collapse as soon as 2050 if serious mitigation actions aren't taken in the next decade. Published by the Breakthrough National Centre for Climate Restoration in Melbourne (an independent think tank focused on climate policy) and authored by a climate researcher and a former fossil fuel executive, the paper's central thesis is that climate scientists are too restrained in their predictions of how climate change will affect the planet in the near future. [[Top 9 Ways the World Could End](https://www.livescience.com/36999-top-scientists-world-enders.html)] The current climate crisis, they say, is larger and more complex than any humans have ever dealt with before. General climate models — like the one that the [United Nations' Panel on Climate Change](https://www.ipcc.ch/sr15/) (IPCC) used in 2018 to predict that a global temperature increase of 3.6 degrees Fahrenheit (2 degrees Celsius) could put hundreds of millions of people at risk — fail to account for the sheer complexity of Earth's many interlinked geological processes; as such, they fail to adequately predict the scale of the potential consequences. The truth, the authors wrote, is probably far worse than any models can fathom. How the world ends What might an accurate worst-case picture of the planet's climate-addled future actually look like, then? The authors provide one particularly grim scenario that begins with world governments "politely ignoring" the advice of scientists and the will of the public to decarbonize the economy (finding alternative energy sources), resulting in a global temperature increase 5.4 F (3 C) by the year 2050. At this point, the world's ice sheets vanish; brutal droughts kill many of the trees in the [Amazon rainforest](https://www.livescience.com/57266-amazon-river.html) (removing one of the world's largest carbon offsets); and the planet plunges into a feedback loop of ever-hotter, ever-deadlier conditions. "Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of [**lethal heat conditions**](https://www.livescience.com/55129-how-heat-waves-kill-so-quickly.html), beyond the threshold of human survivability," the authors hypothesized. Meanwhile, droughts, floods and wildfires regularly ravage the land. Nearly one-third of the world's land surface turns to desert. Entire ecosystems collapse, beginning with the planet's coral reefs, the rainforest and the Arctic ice sheets. The world's tropics are hit hardest by these new climate extremes, destroying the region's agriculture and turning more than 1 billion people into refugees. This mass movement of refugees — coupled with [shrinking coastlines](https://www.livescience.com/51990-sea-level-rise-unknowns.html) and severe drops in food and water availability — begin to stress the fabric of the world's largest nations, including the United States. Armed conflicts over resources, perhaps culminating in nuclear war, are likely. The result, according to the new paper, is "outright chaos" and perhaps "the end of human global civilization as we know it." How can this catastrophic vision of the future be prevented? Only with the people of the world accepting climate change for the emergency it is and getting to work — immediately. According to the paper's authors, the human race has about one decade left to mount a global movement to transition the world economy to a zero-carbon-emissions system. (Achieving zero-carbon emissions requires either not emitting carbon or balancing carbon emissions with carbon removal.) The effort required to do so "would be akin in scale to the [World War II](https://www.livescience.com/65025-nazi-massacre-site-artifacts.html) emergency mobilization," the authors wrote. The new policy paper was endorsed with a foreword by Adm. Chris Barrie, a retired Australian defense chief and senior royal navy commander who has testified before the Australian Senate about the devastating possibilities climate change poses to national security and overall human well-being." I told the [Senate] Inquiry that, after [nuclear war](https://www.livescience.com/65603-doomsday-plane-can-survive-nuclear-attack.html), human-induced global warming is the greatest threat to human life on the planet," Barrie wrote in the new paper. "Human life on Earth may be on the way to extinction, in the most horrible way.

### Legitimacy (:45)

#### Permanent membership has destroyed good will in the UN

**Conkar 23 - Zeynep Conkar is a deputy producer at TRT World, July 19, 2023** “UNSC’s veto power: A long-standing obstacle to accountability and reform” [https://www.trtworld.com/middle-east/unscs-veto-power-a-long-standing-obstacle-to-accountability-and-reform-14104290] Accessed 3/27/24 SAO

In accordance with its name, the “United Nations” should involve a collective effort of nations coming together and striving to implement the organisation’s charter of maintaining peace and security, upholding international law and protecting human rights and freedoms. In reality, however, the UN’s member nations don’t seem to stand united – and a great imbalance is apparent. Some of these nations wield a disproportionate amount of power, while others struggle, seemingly powerless, as they fight for the right to live. In a world where the fundamental rights of humans have proven not to be universal and on a planet where injustice continues to prevail, the UNSC stands as a symbol of failed promises. Is the Security Council undermining the UN? Asked about whether the UN accomplishes its role in upholding peace and maintaining security, Falk says, “The UN is a great disappointment, because it doesn't seem to be fulfilling the values that underlay the formation of this, supposedly a complex organisation dedicated to preserving human rights and peace and security.” As far as the UNSC goes, given its supranational authority, it is essential that a mechanism be established to prevent the implementation of decisions in conflict with international law. “Without proper oversight mechanisms, the UNSC has now transformed into ‘Leviathan’. Many important decisions – most of which are backed by the US – lack transparency, involve dirty bargaining, and there is no accountable council that is answerable to the General Assembly,” says Aral. “Another issue is the representation ratio of the UNSC, which is strikingly low. The five permanent members, which initially represented 10 percent of all countries back in 1945, now only account for a mere 2.5 percent. And in a world with 8 billion [people], where 2 billion are Muslims, there is no representation for Muslims within the Council,” he adds. “What would be the consequence if these five permanent members act in opposition to peace and security?” Aral asks, responding, “That's when the UN’s functional capacity disappears. Hence, what we essentially convey to permanent members is that they are above international law.” These issues – both the UN’s limitations and the disproportionate power wielded by some of its members – have sparked a growing demand for reform, with those making the demands asking for their fundamental concerns regarding the Council's structure be addressed. “The puzzle is how do you reform the UN without destroying it? And that's a tricky question – trickier than it might seem,” Falk adds. “The UN is a very important institution, but the illegitimacy of the UNSC undermines the overall image of the UN. This structure, as long as it remains the same, will continue to generate mistrust,” Aral says. The G-4 (Group of Four) is among the blocs calling for reform of the UNSC. Consisting of Brazil, Germany, India and Japan, the G-4 countries support each other's bids for permanent seats on the UNSC. Arguing that adding more permanent members could lead to further inequalities in decision-making process, the Uniting for Consensus (UfC) group – including Türkiye, Italy, Spain, Argentina, Mexico, Pakistan and Canada – firmly opposes the G-4's aspirations for the expansion of the UNSC with additional permanent members. Through the expansion of non-permanent seats, the UfC advocates for a more inclusive and representative Council, allowing a broader range of countries to have a voice in addressing global issues. As Turkish President Recep Tayyip Erdogan says, “We believe that when we say ‘the world is bigger than five,’ we become the voice of the common conscience of the entire human race,” and he asks: “Why should not all [195] countries in the world – in a rotational manner – have a permanent seat at the UN Security Council?” “The UNSC has taken such a form, only serving the interests of its five permanent members holding veto rights, but standing idle to the oppressions in other parts of the world,” says President Erdogan. “A fairer world is possible,” the Turkish president maintains – with a more inclusive and equitable Security Council.

#### UNSC reform is essential to generate multilateral buy-in to solve every major existential problem.

**Guterres 23 - UN Secretary-General António Guterres’, UN Press, December 10th 2023** “Security Council Paralysed by Divisions, Global Governance Failing to Manage Climate, New Technology Threats, Secretary-General Tells Doha Forum, Urging Deep Reforms” [https://press.un.org/en/2023/sgsm22078.doc.htm] Accessed 3/25/24 SAO

Your Highness, Sheikh Tamim bin-Hamad Al Thani, thank you very much for convening the Doha Forum. Your theme, Building Shared Futures, could not be more timely. Recent events, from the COVID-19 pandemic to the climate crisis and the digital revolution, have shone a spotlight on one fact: We are all deeply interconnected. No man is an island, as the poet wrote. Today, to be gender sensitive, I would say no one is an island. And indeed today, no island is just an island. Melting ice in Antarctica causes floods and droughts across Africa. Hunger in Haiti is inflamed by bombs in the Black Sea. Humanity shares one destiny and one planet. And today, the planet is being hit by a perfect storm. Geopolitical divides. Global inequalities. Raging conflicts. Rising poverty and hunger. Climate chaos. Crushing debt and skyrocketing prices. New technology without governance or guardrails. Our world is in a difficult moment of transition. For decades, despite terrible conflicts, geopolitical relations were relatively stable, based on alliances around the two cold war super-Powers. Today, after a short period of unipolarity, we are moving towards a multipolar world. This brings new opportunities for leadership, justice and balance in global relations — but it also creates complexity. And we need strong multilateral institutions to manage that complexity in order to avoid chaos. But **today,** those **institutions are weak and outdated**. They are caught in a time warp, reflecting the reality of 80 years ago. Social, economic and political relations have changed dramatically since then. We need a serious effort to bring global structures up to date, rooted in equality and solidarity and based on the United Nations Charter and international law. Take the Security Council. The preeminent forum for the peaceful resolution of international disputes is paralysed by geostrategic divisions. This fact is undermining solutions from Ukraine to Myanmar to the Middle East. The horrific attacks by Hamas on 7 October, followed by the relentless Israeli bombardment of Gaza, were met by a resounding silence from the Council. After more than one month, the Council finally passed a resolution, which I welcome. But that delay comes at a cost. The Council’s authority and credibility were severely undermined. And the resolution is not being implemented. Last week, I delivered a letter to the President of the Security Council, invoking Article 99 of the Charter of the United Nations for the first time since I became Secretary-General in 2017. I wrote that there is no effective protection of civilians in Gaza. As a matter of fact, during my mandate the number of civilian casualties in Gaza in such a short period is totally unprecedented. The health care system is collapsing. I expect public order to completely break down soon and an even worse situation could unfold, including epidemic diseases and increased pressure for mass displacement into Egypt. I said that we are facing a severe risk of collapse of the humanitarian system. The situation is fast deteriorating into a catastrophe with potentially irreversible implications for Palestinians as a whole and for peace and security in the region. And I urged the Security Council to press to avert a humanitarian catastrophe and I reiterated my appeal for a humanitarian ceasefire to be declared. Regrettably, the Security Council failed to do it, but that does not make it less necessary. So, I can promise I will not give up. I thank His Highness and the Government of Qatar for their mediation role, particularly in the agreement on a humanitarian pause, increased humanitarian assistance, and the release of hostages. Beyond the Security Council, global governance is failing to manage **two existential threats**. First, climate. We need far more ambition to reduce greenhouse gas emissions and ensure climate justice. Despite promises and pledges, our climate is in breakdown. Emissions are at an all-time high. And fossil fuels remain a major cause. Renewable energy is cheap, clean, and infinite. It can meet the world’s growing energy demand without poisoning our environment and suffocating our planet. I urge fossil fuel companies to use their enormous resources to lead the renewables revolution. And I urge leaders at COP28 [Twenty-eighth Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change] in Dubai to agree on deep cuts to emissions, in line with the 1.5°C limit. That is the only road not only to climate sustainability, but economic sustainability. The proposal I made, the Climate Solidarity Pact, calls on big emitters to make extra efforts to cut emissions and wealthier countries to support emerging economies to do so. And we also need deep reforms to our global financial architecture. We must have more ambition on reduction of emissions, but also more ambition on climate justice because developing countries that are not contributing to climate change are the ones that are paying the heaviest price. For those financial changes to take place, the Bretton Woods system must be made truly universal and representative of today’s economic reality and not of the economic reality of the post-WWII. Multilateral development banks must change their business model and leverage far more private finance at reasonable cost for developing countries to invest in climate action and the implementation of the Sustainable Development Goals. Second, we must face up to the threat posed by new technologies. Artificial intelligence could provide solutions to many global challenges. But without adequate regulation, it will also lead us into deep and troubled waters. AI is already supercharging hate speech and division, enabling data harvesting and mass surveillance, and exacerbating vast inequalities. To help advance the search for solutions, I have appointed a multistakeholder High-Level Advisory Body on AI which will provide preliminary recommendations by the end of this year. These technologies cry out for governance. And I believe that governance should be networked and inclusive, flexible and agile, and that the UN should be at the centre of the network as the only organization that combines legitimacy, universality and diversity. This month marks the seventy-fifth anniversary of the Universal Declaration of Human Rights. But we are not living up to the promise of this landmark document. Reforms to global governance must be grounded in the Universal Declaration and the enduring values of the UN Charter. Next September’s Summit of the Future is a once-in-a-generation opportunity for these important decisions to look seriously into the reform of our global multilateral governance system. We have put forward a series of proposals to Member States and I look forward to their engagement and support. A Global Digital Compact would mitigate the risks of digital technologies and help to harness their benefits for the good of humanity. Reforms of the global financial architecture would enable Governments in developing countries to be able to invest in education, health, jobs and social protection for their people instead of being drowned in debt and without fiscal space to act. Reforms to the Security Council, and a proposed New Agenda for Peace, would help to prevent and resolve conflict, deliver equity and justice, have no double-standards, rebalance geopolitical relations, and give developing countries a greater voice on the international stage. **As the forces of fragmentation gain ground, we must build bridges and find shared solutions to global challenges.** We need the solidarity that is evident here at the Doha Forum to advance these ambitious agendas. Now is truly the time for building shared futures — uniting behind solutions and transforming our world for good.

## Plastics Tech Policy Aff Case

### Innovation

#### American companies are addicted to plastic

George 23 - Sarah George, edie, Published 3rd August 2023 “‘Dangerous complacency’: Big businesses accused of underestimating plastics-related risks” [https://www.edie.net/dangerous-complacency-big-businesses-accused-of-underestimating-plastics-related-risks/] Accessed 2/15/24 SAO

That is according to a new analysis from Planet Tracker today (3 August). The organisation analysed more than 8,200 documents from major plastic companies and found that 83% make no mention of any kind of risk. Documents were analysed from all parts of the plastic value chain, including fossil fuel extractors like ExxonMobil and TotalEnergies; chemical processors such as DOW and INEOS; packaging manufacturers such as Huhtamaki and consumer goods firms. Included in this latter cohort are the likes of Unilever, Nestle, Danone, Coca-Cola, Pepsico, Modelez and Kraft Heinz. Within this category, Unilever was the most frequent discloser of information, accounting for 24% of all disclosures. Documents covered include filings, transcripts and documents sent between companies and external contacts such as Government bodies, standard-setters, suppliers and investors. Planet Tracker found that these documents rarely mention plastic-related risks. Of those that did, almost three-quarters (73%) mentioned risks relating to waste management at the end of the product’s use. The primary focus was recycling, not reuse. Only 6% of the documents mentioned risks relating to environmental and social issues upstream. Planet Tracker did uncover an increase in plastics-related risk disclosures through annual reports, but concluded that this has not yet translated into a change in everyday conversations with key stakeholders. Instead, it is more likely to result from tightening legal requirements on environmental disclosures. The number of annual reports from the companies including some kind of plastic-related risk disclosures was six times higher than it was five years ago. Again, disclosures were typically about recyclability and waste management than upstream risks such as pollution and greenhouse gas emissions. Planet Tracker’s senior investment analyst Thalia Bofiliou said: “The plastics industry today faces one of the longest lists of risks of any sector, which should be on the mind of every executive and every financier. The risk disclosures of these companies should include exposure to CO2 emissions, harmful toxic discharges, visible and invisible plastic pollution and rising harm to people and nature through chemical additives exposure. “Plastic companies across the value chain are displaying a dangerous complacency to very real, and very material, risks. We call for the capital markets to consider these factors in their investments, and push for more concrete change, challenging assumptions and raising these issues with management frequently”.

#### Bans solve. UK saw innovation triple after legislation on plastic

Thaman 23 - Akshay Thaman, Member of the British Patent Information Professionals group, June 5th 2023 “Decomposing the facts on plastic waste” [https://sourceadvisors.co.uk/insights/our-research/sector-research/decomposing-the-facts-on-plastic-waste/] Accessed 2/15/24 SAO \* chart shows triple

In recent years, the UK Government has identified the use of single-use plastics as a source of avoidable waste. In an attempt to eradicate avoidable waste, the Government published its ‘25-year plan to improve the environment’ in 2018, the strategy contains ambitious targets to: Achieve zero avoidable waste by 2050; and To eliminate avoidable plastic waste by 2042. Recently, several policies have been implemented to position the UK toward achieving these targets, the policies are primarily behavioural in nature and include (but are not limited to): A mandatory charge for single-use plastic bags in large retailers. A ban on single use plastic items comprising of plastic straws, stirrers, and cotton buds. From October 2023, this will be extended to plastic plates, trays, bowls, cutlery, balloon sticks, and certain types of polystyrene cups and food containers. A Plastic Packaging Tax applied to plastic goods manufactured or imported with less than 30% recycled plastic. Now, policy changes can only get you so far, innovation will have a complimentary role to play in reducing the impact of plastic waste globally. Patent data is a great source of information that can be utilised to identify and monitor technology trends over time. It is a powerful resource used by many top global innovation and technology players to analyse and predict innovative activity within a technology area. In this article, I will briefly use patent data to illustrate past innovative activity related to plastic packaging and recycling. Innovation activity over time

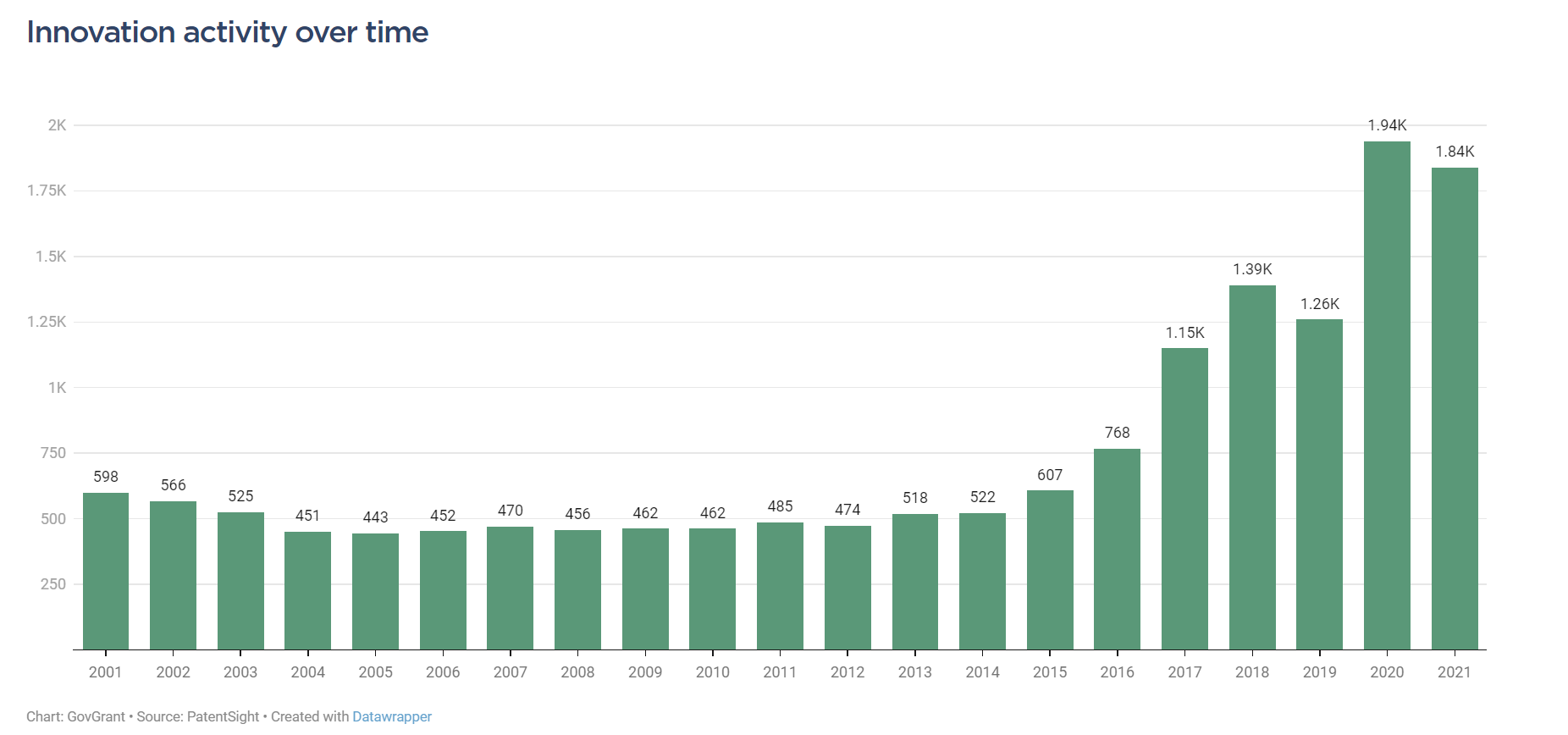


Figure 1 shows the number of patent filings relating to plastic packaging and recycling from 2001-2021. Patent filings can give a good indication of the level of innovation in a particular technology area. This graph demonstrates that patent filings were relatively stable between 2001 and 2015, eventually leading to an upsurge in filings from 2015 onwards**.** Drivers for increased innovative activity may have been a combination of legislative action such as the Paris Agreement and policy initiatives, such as the single use plastic bag charge adopted by various countries, including the UK and France. Innovation by country Figure 2 shows a breakdown of patent filings (accumulative volume) by country up to 2021. This gives a geographical representation of where inventions related to plastic packaging and recycling are being developed. It is worth noting that filings from China tend to top the charts for most technology areas, as of data in 2021, China accounts for approximately half of all patent applications filed globally in that year. The UK comes in at no.7 for plastic packaging and recycling, although they may be amongst the top filers, this suggests that the UK could do more to become world leaders in this area. Technologies developed in the UK Figure 3 shows the top technologies filed in the UK (by accumulative volume) within the field of plastic packaging and recycling up to 2021. The technologies described in the chart above can be summarised by the following categories: Improvements in plastic composition, including: Biodegradable compositions made from biopolymers. Alternative materials made from recycled plastic. Improvements in plastic recycling, including: Novel processes and machinery to recover, separate and recycle plastic waste. Improvements in plastic products such as bottles and containers, including: Recyclable plastic products. Biodegradable plastic products made from the use of a biodegradable polymer composition. The technologies listed above all attempt to reduce the persistence of plastic products, enabling plastics to better decompose or be recycled. The data above also suggests that novel technical solutions to this problem are likely to be eligible for patent protection in the UK. Green Channel Interestingly, the UK’s Intellectual Property Office (UKIPO) launched a scheme to incentivise the development of green technologies in the UK through implementing the Green Channel in 2009. The Green Channel allows for an accelerated application process, provided that the technology you wish to patent offers an environmental benefit. The acceleration can dramatically reduce the time taken from application to granted patent. Usually a typical patent application takes, on average, approximately 3 years to grant, the Green Channel can reduce this to lower than 18 months. The Green Channel can provide a useful tool for environmentally beneficial innovations that require a quick grant for investment purposes or are looking to immediately market your solution. GovGrant has helped clients utilise the benefits of the Green Channel, contact us if this may be of interest to you. What does this tell us about the future direction of plastic waste innovation? Well, the increased policy measures to curb avoidable plastic waste, coupled with the increase in innovative activity in this area, suggests that there is political and societal pressure for novel solutions. The increase in innovative activity also suggests that this is becoming an increasingly competitive market and one that is still developing.

#### A single-use ban specifically gives small businesses a competitive advantage in product innovation

Meers 23 - Bob Meers, Builtin, Former CEO of Reebok, Published on June 27, 2023 “Why Startups Are Poised to Lead the Bioplastics Revolution” [<https://builtin.com/greentech/startups-lead-bioplastics-innovation>] Accessed 2/15/24 SAO

Sweeping legislative action around sustainability across the world in recent years has changed the way brands do business, and the plastics sector is no exception. Regulatory frameworks such as the Federal Trade Commission's (FTC) Green Guides have opened new horizons for startups and emerging tech brands striving to revolutionize the bioplastics industry. With growing consumer skepticism towards eco-friendly claims, especially from larger corporations, startups are in a unique position to differentiate themselves. How has evolving sustainability legislation dictated new priorities for startups? How does greenwashing play into this conversation? The Evolution of Legislation and Plastic Innovation Plastic-related legislation has undergone a progressive evolution over the years. Driven by escalating concerns about environmental pollution, climate change and health, this evolution includes bans on single-use plastic items, microplastic restrictions and regulations endorsing recycling and composting, all of which have shaped the trajectory of plastic innovation. We’re also seeing consequences play out for larger brands that haven’t changed their ways. One example is a recent lawsuit against an airline alleging that their claims to be “the world’s first carbon-neutral airline” were misleading. For startups, these legislative shifts have carved out new paths to explore. Each regulation serves as a call to action to devise innovative solutions compliant with these new rules. For example, bans on single-use plastics have led to a surge in startups focusing on alternatives such as biodegradable and reusable materials. Companies like Loliware, Kelpi and Kaneka BioPolymers are examples of brands pushing forward innovation in the space. Loliware and Kelpi develop bioplastics made of seaweed. RWDC Industries also utilizes used cooking oil to produce unique bioplastics. Single-Use Plastics Bans and the Influence on Startups Recently enacted policies around single-use plastics in major U.S. cities like New York City, Los Angeles, Seattle, Philadelphia and Washington, D.C. have opened doors for startups to devise bioplastic solutions catering to an urgent need for alternatives. In comparison to larger conglomerates, startups and emerging tech brands are well-positioned to swiftly adapt and capitalize on new market spaces created by legislative action. The push towards bioplastics has led to a proliferation of more agile brands that focus on developing new, eco-friendly materials that adhere to standards outlined by guidelines like the Green Guides. Thoughtful startups can be in a strong position for success from this perspective because they’re leaner than big corporations. This allows them to pivot priorities, reallocate resources and shift with the quickly changing environment. These smaller, more nimble businesses are not burdened by legacy systems or bureaucratic hierarchies that impede swift decision making. This means they’re able to iterate quickly on new ideas, development and deployment of new products. In addition, because of their size, startups often facilitate closer connections with their customer base, allowing them to receive, respond to and integrate user feedback into new product iterations far more quickly than larger conglomerates. The FTC Green Guides’ insistence on accountability around environmental claims has also nurtured a market for startups offering lifecycle analysis, carbon footprint calculation and supply chain auditing services. These startups can aid businesses in substantiating their environmental claims and maintaining compliance. Understanding the FTC’s Green Guides The FTC’s Green Guides serve as a blueprint for businesses to avoid unsubstantiated environmental claims. They address marketing approaches for the environmental aspects of products and enforce a greater degree of transparency and accuracy. The FTC recently concluded the public feedback phase for its updated Green Guides, which was last amended in 2012. While we don’t know exactly what the changes will entail, the upcoming 2023 revision is set to transform the playing field for startups engaged in plastics, particularly bioplastics. Bloomberg reported last month that the FTC alluded that ‘recyclable’ product claims might be under increased scrutiny in the new revisions. Recent crackdowns on greenwashing have prompted startups to prioritize transparency and third-party validation. This has encouraged emerging brands to reinforce their claims with scientific evidence. Preparing for a Startup-Driven Circular Economy As legislation evolves, plastic innovation startups must remain nimble, open minded and informed to seize arising opportunities. Smart entrepreneurs should start to align their product market strategies with anticipated legislative trends. In this moment of change on the global stage, sustainability startups are in a unique position to create products that could change the way we view plastic. The close relationship between legislation and innovation will continue to shape the future of plastics. The startup community, with its inherent flexibility and ability to pivot, is well positioned to spearhead the journey toward a future of reduced waste and a circular economy.

#### Small businesses are uniquely innovative on green tech

Breitzman & Thomas 11 - Anthony Breitzman and Patrick Thomas, US Small Business Administration, October 2011 “Analysis Of Small Business Innovation In Green Technologies” [https://advocacy.sba.gov/2011/10/01/analysis-of-small-business-innovation-in-green-technologies/] Accessed 2/15/24 SAO

Small innovative firms in this study are even more productive, measured in terms of patents per employee, than was shown in the previous studies. The current study finds that small innovative firms are 16 times more productive than large innovative firms in terms of patents per employee. In green technologies, while four times as many large as small innovative firms have at least one green patent, small firms are more likely than larger firms to have green technology as a core part of their business. Small innovative firms are 16 times more productive than large innovative firms in terms of patents per employee. Small innovative firms with fewer than 500 employees produced 27 patents per 100 employees, compared with 1.6 patents per 100 employees in large firms with 500 or more employees. Patents of the small firms in the study were cited 79 percent more by recent patents than is typical for other patents of the same age and patent classification. Patents of the large firms were cited just slightly above average. The small firms in the study also outperformed the large firms in patent originality, generality, and growth. U.S.-based organizations were responsible for 43 percent of U.S. patents in green technologies in 2005-2009, while Japanese organizations were responsible for 32 percent. No other country had more than 6 percent. Green patents form a higher percentage of the portfolios of small firms with at least one green patent (20 percent on average) than of the large firms’ portfolios (1.5 percent). Green patents from small firms are cited 2.5 times as frequently as green patents from large firms. While small firms account for about 8 percent of all U.S. patents in the U.S. innovative firm database, they account for 14 percent of green technology patents. Small firms account for more than 32 percent of the patents in both smart grids and solar energy, and 15 percent of patents in batteries and fuel cells. Eighty percent of the “prolific” inventors—those with five or more recent green patents with a citation index of 1 or more—from small green technology firms had previously worked at large companies, or large government or university labs.

#### Innovation creates jobs

UNEP 23 - United Nations Environment Programme, 05-31-23 “Côte d’Ivoire sets sights on plastic pollution,” [https://www.unep.org/news-and-stories/story/cote-divoire-sets-sights-plastic-pollution#:~:text=Research%20shows%20that%20shifting%20to,sector%2C%20largely%20in%20developing%20countries.] //AL

“It is important for the government to support companies that engage in the circular economy and recycling, as this can generate jobs and income for populations,” says Rahmane, who has developed a machine to transform plastic waste into pyrolytic oil, which can be used to power generators. Research shows that shifting to a circular economy by 2040 could create 700,000 additional jobs globally and improve livelihoods for millions of workers in the informal sector, largely in developing countries.

#### Private sector innovation is key to solve climate change

Henry 17, Simon. “Climate Change Cannot Be Solved by Governments Alone. How Can the Private Sector Help?” World Economic Forum, 21 Nov. 2017, www.weforum.org/agenda/2017/11/governments-alone-cannot-halt-climate-change-what-can-private-sector-do/.  Programme Director, International Carbon Reduction & Offset Alliance (ICROA) //sid

Climate leadership is also an opportunity for many organizations, and this was the most popular reason for purchasing carbon credits in Ecosystem Marketplace’s [2016 survey of buyers](http://www.forest-trends.org/documents/files/doc_5677.pdf%5Bforest-trends.org%5D). Companies are looking to differentiate from their competitors, and build their brand, by taking a leadership role on climate. Offsetting plays an integral role in delivering this climate leadership status, alongside direct emissions reductions. The survey indicated that companies that included offsetting in their carbon management strategy typically spend about 10 times more on emissions reductions activities than the typical company that doesn’t offset.

Beyond these direct commercial reasons for companies to take voluntary action, there are many broader, societal motivations at play. Climate change is a global, multidecade challenge that needs solutions and input from all stakeholders. It transcends the short-term nature of politics, which will inevitably experience changes in priorities, personnel and knowledge. Because of this, climate change cannot be solved by governments alone. Instead, it needs significant and long-term investment from the private sector. Companies that take a longer-term outlook recognise this and want to contribute to the solution to help secure the viability of their businesses.

#### Climate change leads to extinction

**Specktor 19** - Brandon Specktor writes about the science of everyday life for Live Science, and previously for Reader's Digest magazine, where he served as an editor for five years. He grew up in the Sonoran Desert, but believes Sonoran hot dogs are trying way too hard. “Human Civilization Will Crumble by 2050 If We Don't Stop Climate Change Now, New Paper Claims”, Live Science, 06/04/21 [https://www.livescience.com/65633-climate-change-dooms-humans-by-2050.html] Accessed 02/11/21 AHS // AP

It seems every week there's a scary new report about how man-made climate change is going to cause the collapse of the world's ice sheets, result in the extinction of up to [1 million animal species](https://www.livescience.com/65314-human-influence-species-extinction.html) and — if that wasn't bad enough — make our [beer very, very expensive](https://www.livescience.com/63832-climate-change-will-ruin-beer.html). This week, a new policy paper from an Australian think tank claims that those other reports are slightly off; the risks of climate change are actually much, much worse than anyone can imagine. [According to the paper](https://docs.wixstatic.com/ugd/148cb0_b2c0c79dc4344b279bcf2365336ff23b.pdf), climate change poses a "near- to mid-term existential threat to human civilization," and there's a good chance society could collapse as soon as 2050 if serious mitigation actions aren't taken in the next decade. Published by the Breakthrough National Centre for Climate Restoration in Melbourne (an independent think tank focused on climate policy) and authored by a climate researcher and a former fossil fuel executive, the paper's central thesis is that climate scientists are too restrained in their predictions of how climate change will affect the planet in the near future. [[Top 9 Ways the World Could End](https://www.livescience.com/36999-top-scientists-world-enders.html)] The current climate crisis, they say, is larger and more complex than any humans have ever dealt with before. General climate models — like the one that the [United Nations' Panel on Climate Change](https://www.ipcc.ch/sr15/) (IPCC) used in 2018 to predict that a global temperature increase of 3.6 degrees Fahrenheit (2 degrees Celsius) could put hundreds of millions of people at risk — fail to account for the sheer complexity of Earth's many interlinked geological processes; as such, they fail to adequately predict the scale of the potential consequences. The truth, the authors wrote, is probably far worse than any models can fathom. How the world ends What might an accurate worst-case picture of the planet's climate-addled future actually look like, then? The authors provide one particularly grim scenario that begins with world governments "politely ignoring" the advice of scientists and the will of the public to decarbonize the economy (finding alternative energy sources), resulting in a global temperature increase 5.4 F (3 C) by the year 2050. At this point, the world's ice sheets vanish; brutal droughts kill many of the trees in the [Amazon rainforest](https://www.livescience.com/57266-amazon-river.html) (removing one of the world's largest carbon offsets); and the planet plunges into a feedback loop of ever-hotter, ever-deadlier conditions. "Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of [lethal heat conditions](https://www.livescience.com/55129-how-heat-waves-kill-so-quickly.html), beyond the threshold of human survivability," the authors hypothesized. Meanwhile, droughts, floods and wildfires regularly ravage the land. Nearly one-third of the world's land surface turns to desert. Entire ecosystems collapse, beginning with the planet's coral reefs, the rainforest and the Arctic ice sheets. The world's tropics are hit hardest by these new climate extremes, destroying the region's agriculture and turning more than 1 billion people into refugees. This mass movement of refugees — coupled with [shrinking coastlines](https://www.livescience.com/51990-sea-level-rise-unknowns.html) and severe drops in food and water availability — begin to stress the fabric of the world's largest nations, including the United States. Armed conflicts over resources, perhaps culminating in nuclear war, are likely. The result, according to the new paper, is "outright chaos" and perhaps "the end of human global civilization as we know it." How can this catastrophic vision of the future be prevented? Only with the people of the world accepting climate change for the emergency it is and getting to work — immediately. According to the paper's authors, the human race has about one decade left to mount a global movement to transition the world economy to a zero-carbon-emissions system. (Achieving zero-carbon emissions requires either not emitting carbon or balancing carbon emissions with carbon removal.) The effort required to do so "would be akin in scale to the [World War II](https://www.livescience.com/65025-nazi-massacre-site-artifacts.html) emergency mobilization," the authors wrote. The new policy paper was endorsed with a foreword by Adm. Chris Barrie, a retired Australian defense chief and senior royal navy commander who has testified before the Australian Senate about the devastating possibilities climate change poses to national security and overall human well-being." I told the [Senate] Inquiry that, after [nuclear war](https://www.livescience.com/65603-doomsday-plane-can-survive-nuclear-attack.html), human-induced global warming is the greatest threat to human life on the planet," Barrie wrote in the new paper. "Human life on Earth may be on the way to extinction, in the most horrible way.

### International Treaty (1:45)

#### An international treaty on plastics is coming now but US corporate influence is gutting it

Pekow 23 - Charles Pekow, Mongabay, April 27th 2023 “U.N. parties are worlds apart on plastics treaty solutions” [https://news.mongabay.com/2023/04/u-n-parties-are-worlds-apart-on-plastics-treaty-solutions/] Accessed 2/6/24 SAO

In late May, delegates from 175 countries will gather in Paris in the next round of a global effort to save the world from plastic. Observers, representing a coterie of interest groups seeking to influence the process, will also attend. This five-day second session of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution comes a little more than a year after a first agreement was reached in March 2022 by all participating nations to develop a plan to stop plastic contamination of the world’s oceans, lands and air. There’s a non-binding deadline to come up with an enforceable plan by 2025. With the world awash in toxic plastic waste, and 1 million single-use plastic bottles bought globally every minute, the urgency for reaching a strong agreement is not lost on the U.N. negotiators. But other than the 2025 target date, the world hasn’t agreed to much else. Nations still need to hash out to what degree the treaty will focus on recycling, reducing disposable single-use plastic products, manufacturing less harmful materials, and much more. Countries remain especially far apart on what should be required by law and what should be voluntary. Island nations suffering from pollution washed up on their shores want mandatory controls and plastic production limits, while producer nations, such as China and the U.S., are seeking more discretionary action with a recycling focus, rather than cradle-to-grave oversight. The first session and other meetings over the past year focused on procedural matters. By early April, 67 nations and 175 other “stakeholders” had submitted position papers staking out a wide range of views. China, for instance — the world’s biggest plastic source, accounting for 32% of global production in 2021 — seeks a focus on “leakage” and “mismanagement of discarded plastic” and wants to temper the treaty by taking into account “the significant role and contribution of plastics to human society and … the whole socioeconomic system [with the final document considering] the synergy between economy, society and environment.” China prefers a more limited treaty that deals primarily with waste collection and recycling, and says that production issues, such as plastic taxes and banning certain additives, should be left up to individual nations. The Pacific island nation of Palau, on the other hand, says “Turn it off at the tap … by stopping the production of single use and unnecessary plastics.” The policies of reduce, reuse and recycling aren’t doing enough, it says. “As a non-producing country, we are downstream in the plastics lifecycle as we import many products in plastic containers,” Palau’s submission says. “Added to this are the plastics of unknown origins that wash up on our shores daily.” The European Union suggests some specific implementation actions, such as “target” dates to reduce plastic production, including “national commitments”; the banning of non-recyclable additives that harm human health and the environment; and forbidding or restricting some of the most common products that litter the Earth, such as plastic eating utensils and packaging. The United States, as with China, proposes leaving regulation largely up to individual nations, seeking a “country-driven instrument” that would be far more voluntary than internationally binding. The U.S. is also a leading plastic producer and a top exporter of plastic trash. A variety of agencies helped draft the U.S. submission, led by the State Department but also including the departments of commerce, agriculture, and health and human services, plus the Environmental Protection Agency, White House, and others. The 12-page U.S. submission includes eight references to “voluntary approaches,” and one to “voluntary and mutually agreed terms.” It calls for a mix of worldwide and nation-specific measures and says that each nation should develop a plan of some sort, including reporting. It’s well understood that the most successful environmental treaty of all time, the 1987 Montreal Protocol, relied heavily on the mandatory control of the production of substances that deplete the ozone layer. By comparison, the 2015 Paris Climate Agreement, with its voluntary nation-by-nation approach, has so far fallen dangerously short of its carbon emission reduction targets. The U.S. government, in determining its volunteer-centric position on plastics, has not been immune to the influence of business interests. As the State Department put it in a statement to Mongabay, it “regularly holds stakeholder meetings, including with organizations from civil society, private sector, and others to seek input during our position development process.” The petrochemical industry is among those stakeholders, and it certainly hopes to influence the shape of any global plastics agreement. The American Chemistry Council, which represents, among others, ”America’s plastic makers,” spent $19.82 million last year on lobbying the U.S. federal government on a multitude of matters, according to Open Secrets. It hired nine outside law and government relations firms to represent it. “The United States is much more closely aligned with [Russia] and Saudi Arabia, than with the European Union at this point” in the plastic treaty negotiations, says John Hocevar, oceans campaign director at Greenpeace USA. In its position paper, Russia emphasized “that the goal of the agreement is not to eliminate the production or use of plastic or impede international trade, but to resolve the issue of polluting the environment with plastic waste.” The Saudi statement calls for “more effective waste management, adapting circularity, advanced recycling technologies, and empowering vulnerable societies that could be affected by this instrument.” The international Business Coalition for a Global Plastics Treaty favors a strong, legally binding international agreement. Founded last September, it describes itself as “a group of businesses across the plastics value chain, financial institutions, and key non-governmental organizations… calling for and supporting the development of an ambitious and effective global treaty to end plastic pollution.” The coalition includes more than 80 manufacturers, retailers, waste management firms and nonprofits. It proposes moving toward safer plastics that don’t leak microplastics and phasing out single-use packaging. Its vision statement says plastic pollution can be ended by 2060 through a “circular economy approach” that ends waste. Environmental NGO WWF convened a meeting of the coalition in March 2023 in Washington, D.C., with more than 150 attendees from business, government and nonprofits. WWF says it plans to distribute policy recommendations arising out of that gathering, including proposals to improve recycling and deposit returns. Anthony Tusino, WWF’s senior program officer for plastics policy, gave Mongabay a statement underlining the importance of recycling as part of the solution but acknowledging we “cannot recycle our way out of the problem … but we can understand ways in which we produce less new materials in a way that enables consumers, businesses and governments to work together.” The Plastics Industry Association, which labels itself “the only association that supports the entire plastics supply chain,” wrote that a treaty should “[r]ecognize the many valuable societal values of plastics and packaging.” It wants a focus on improving technological and structural recycling and waste management. “Bans rarely work,” it warned. Recycling and reuse fall short “of what we need to reduce plastic production, which is going to be fundamental to the success of this treaty. We cannot meet our objectives if we keep producing more and more plastic,” Hocevar says. Recycling “is not going to keep plastic out of the environment and it is not going to help human health.” Other groups are making a range of suggestions specific to their causes. The International Council of Beverage Associations wants a treaty that incentivizes recycling and reuse. It cites a need for globalized standards. The U.N.’s own Food and Agriculture Organization stressed the need to reduce plastic use in agriculture, fishing, aquaculture and forestry. The FAO acknowledged that while its own current voluntary guidelines consider sustainability, they “do not specifically address the tradeoffs or life cycle implications of plastics use, nor do they provide recommendations for their sustainable management.” The FAO’s submission acknowledged the need for more research. While calling for voluntary and nation-specific measures, it also suggested international requirements for recycling and controlling microplastics. It recommended the creation of policies providing incentives to encourage alternative products and processes. Some commentators got quite specific with their positions. The Smoke Free Partnership, a European NGO aiming to end tobacco use, suggests adding “the right to health” as a treaty objective, as well as the banning of plastic cigarette filters. “Discarded cigarette butts are toxic waste products with the potential to harm ecosystem services, wildlife, and possibly human health,” it stated. The U.N. parties, and diverse stakeholders trying to influence the parties, remain far apart on what a treaty should cover, while “there is still work to do in establishing the basis for how decisions are going to be made,” Hocevar says. Regarding the U.N. consensus process, Hocevar believes, “It will be a long and difficult journey to get every government in the world to agree … Everything is still on the table,” but the May-June meeting could at least define the process for reaching a worldwide plastic accord.

#### US action on plastics causes modelling that locks in US environmental power

Bukharin 17 - Irina Bukharin, Swarthmore International Relations Journal, Spring 2017 “Environmental Multilateralism: Climate Change and American Decline” [https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1018&context=swarthmoreirjournal] Accessed 2/15/24 SAO

The United States’ poor record of leadership in international environmental policy grows more concerning as the impending effects of unrestrained climate change become increasingly apparent. Though it is the country most able to provide effective leadership, the U.S. is routinely condemned for acting unilaterally, often in ways that undermine international agreements that it sees as counter to American interests (Ivanova 2008, 58). Robert Falkner, political scientist at the London School of Economics, explains: “America’s hegemony has formed the basis for both international leadership and veto power in environmental regime formation” (2005, 585). This lack of international systemic restraint, coupled with the absence of a clear “global strategic imperative” to act on climate change, means that the decentralized U.S. foreign policy apparatus and competition among domestic interest groups can produce variation in U.S. and foreign environmental policy (Falkner 2005; 586, 589). Falkner concludes that “renewed US [sic] environmental leadership is only possible as a result of strong public demand, supported by institutionalized pressure from environmental groups and business interests acting in favor of international regulation” (2005, 597). Falkner’s basic outline of the conditions necessary for the U.S. to assume environmental leadership is helpful in creating a model for promoting positive change in U.S. environmental policy. Leadership by the U.S. is necessary to create a strong plan for reducing the effects of climate change. As Falkner argues, since the U.S. is the global hegemon, it has the ability to work unilaterally or multilaterally, an option that impedes stable global cooperation on climate change. American hegemony is not a constant, however; it is in decline. It is in the United States’ best interest to lead the world in climate negotiations, not only to protect the environment and current related American interests, but also to secure an advantage in the international climate agreement that will serve future American interests. Many American leaders might reject this argument, so it is important to look at a case study in order to understand the conditions under which the U.S. would assume the necessary leadership role. U.S. environmental and business interests aligned because of the mutual reinforcement of scientific evidence and widespread public support. The alignment between these two core interests allowed the U.S. to lead efforts that resulted in the creation of the Montreal Protocol. The U.S. used its power as hegemon to help create the Montreal Protocol, which in turn helped maintain future U.S. advantages in certain areas. Even without the threat of future decline, it is in the United States’ interests to work multilaterally to mitigate the effects of climate change, as environmental consequences will directly harm U.S. national interests and cannot be stopped unilaterally. Climate change has already had a substantial net negative impact on food production, foreshadowing the food insecurity that will result from climate change (IPCC 2005; 5, 13). More indirectly related security threats may arise as well; natural disasters, which have and will continue to increase in frequency and severity “may, when coupled with other triggers, do more to destabilize the government than an armed attack on the nation or its capital” (Busby 2008, 476). The U.S. has an interest in preventing states from failing, which can lead to regional conflict; so it has an interest in stopping events related to climate change. Furthermore, the U.S. will be expected to give aid to the most afflicted countries, and some of this money and support may come from the military (Busby 2008; 475, 476). Even if the United States were to remain a hegemon indefinitely, its interests lie in preventing climate change, not just for moral reasons, but for more pragmatic national interest reasons as well. International cooperation is necessary for successful climate change action, and it will not occur without American leadership. The negative environmental actions of one country frequently affect other countries in unforeseen and unavoidable ways, so “individual states are ill-equipped to respond alone to the myriad of challenges posed by transboundary environmental, social, and health problems” (Schreurs 1997, 1). Additionally, due to the costs of being the first state to act and the problems that can arise with free riders, the international community needs a regulatory system to ensure the long-term viability of any international efforts to combat climate change (Figueres 2012). For several reasons, this will not happen without American leadership. Not only has the U.S. historically been a force for developing international organizations and treaties, but treaties that are not supported by the U.S. are often seen as less legitimate (Ivanova 2008, 58). Furthermore, because the U.S. is the largest contributor to man-made climate change, it is essential the U.S. visibly work to find a solution, otherwise other countries will argue that it is unfair for them to pay to fix the problem that the U.S. had a large part in creating (Falkner 2005, 591). In short, without American participation, no international environmental action can have true legitimacy, stability, and success (Falkner 2005, 591). Falkner is correct that while America remains a hegemon and does not see environmental issues as a matter of national security, it will continue to have the choice to act unilaterally or multilaterally, and this choice will be decided by domestic politics. One thing that he does not consider is that while America does have flexibility in international environmental politics now, it will eventually lose the power that comes with being a hegemon. Because of this, it is in the United States’ long-term interests to establish an international climate change agreement now, using its power to create a system that will benefit it when American power diminishes in the future. To do this would not be to act under structural pressure, but to foresee a situation where structural forces may have more power. This means that the U.S. will not automatically work to create a climate change agreement, so it is necessary to use Falkner’s arguments to determine what domestic conditions must exist for the U.S. to act in its long-term interests. Domestic politics are primarily influenced by environmental interests, business interests, and public opinion, which are informed by scientific evidence and consensus, determining factors that Falkner does not adequately address. All of these arguments can be seen in the case of American leadership preventing destruction of the ozone through the Montreal Protocol. American power has peaked; it should work while it still has a significant advantage over other countries to maximize its power and capabilities for the future, when it exists in a multipolar world. Although its military advantage will likely remain strong for the foreseeable future, trade war is currently much more likely than traditional inter-state conflict. The American military is useful in engaging in regional conflicts, but it is less relevant in the negotiation of environmental treaties (Young 1994, 136). On the other hand, economic power can increase a hegemon’s bargaining power, as a hegemon can better cajole and coerce using the promise of trade or assistance, soft power, or the threat of sanctions (Falkner 2005, 588). However, the American share of the world economy has been decreasing since 1950, while the Chinese share of the world economy has been increasing since then and is now larger than the American share (Thompson 2012, Thompson 2015). As “the old order dominated by the US [sic] and Europe is giving way to one increasingly shared with non-Western rising states,” American dominance is coming to a close, even if not in the immediate future (Ikenberry 2011, 56). In an increasingly multipolar world, the U.S. will not be able to act unilaterally or multilaterally depending solely on its domestic politics. Instead, the international system, and the great powers in the international system, will have a larger influence on how America acts. In order to preserve American interests, the U.S. would benefit from establishing international environmental treaties that favor U.S. interests and give the U.S. a position of power for future negotiations, thus “locking in” American power that might otherwise dissipate. In the past, across a variety of issues, the U.S. has created structures that favor it, and thereby has “spun a web of institutions that connected other states to an emerging American-dominated economic and security order” (Ikenberry 2001, 21). This can be seen in the United Nations, where the U.S. has veto power due to its permanent seat on the Security Council. Even though these institutions have been built primarily by Western nations, rising nations do not want to change the structure or guiding rules of the international order; they want to gain more power within it (Ikenberry 2011, 57). This indicates that there might be little pushback against an international treaty concerning climate change, so long as it includes developing nations. Although this may partially restrain the U.S., “now may be the best time for the United States and its democratic partners to update the liberal order for the new era, ensuring that it continues to provide the benefits of security and prosperity that it has provided since the middle of the twentieth century” (Ikenberry 2011, 58). This means creating a comprehensive international treaty to mitigate the effects of climate change while preserving American interests before they must be ceded to a multipolar world order. The Montreal Protocol is often cited as the best example of both international cooperation and American leadership on an environmental issue. In 1973, scientific evidencebegan to indicate that certain chemicals used in refrigerants and aerosols, among other things, could be destroying the ozone layer, which would increase levels of skin cancer and damage crops. The agreement to phase out these ozone-depleting substances (ODSs) was ratified in 1985, a mere twelve years after the first scientific discovery. At this point in time, all nations in the United Nations have ratified the original Montreal Protocol (UNEP 2014). In this case the U.S. was a key player, and it led the successful phase-out of ODSs that were damaging the ozone layer (Ivanova 2008, 57). The role of American hegemony in creating this treaty provides a coherent, though perhaps overly simplified, model for what needs to happen for American leadership to occur on a climate treaty, as prescribed by Falkner. In the case of the Montreal Protocol, industrial interests shifted to favoring increased regulation after a vocal public demanded it. This shift was founded on the increasingly clear scientific evidence of the reality of ozone depletion. Additionally, the treaty gave an advantage to and protected the American chemical industry in the long term. Support from the chemical industry was crucial in allowing the U.S. to have a prointernational regulation position, as business interests often impede environmental legislation. According to Falkner, “environmental groups and business interests frequently pull in opposite directions when it comes to managing environmental problems,” which causes “rifts within the domestic constituency of US foreign environmental policy” (2005, 595). Businesses often feel it is unfair for their economic interests to be sacrificed for the sake of environmental protection, and they lobby heavily in the name of protecting the U.S. economy (Sussman 2004, 352). In this they are often successful, as they have political access and money to donate to politicians’ campaigns (Harris 2001, 22). *However, businesses will strongly support international legislation if they are already subject to* similar *domestic regulations*, and “much international environmental regulation appears on the international agenda through the process of internationalizing domestic regulation” (Falkner 2005, 595). The chemical industry eventually supported ODS regulation due to falling sales and the realization that this regulation would give them an advantage in creating substitutes. As soon as the ozone depletion theory became widespread, the sale of products using ODSs in the U.S. fell by nearly two thirds (Benedick 1991, 28). Although initially the industry was opposed to any regulation, “soon after the first signs of consumer disquiet showed, industry opposition to the CFC-ozone theory began to crumble” (Harris 2001, 164). In response to this pressure, firms began developing alternatives to ODSs (Benedick 1991, 31). Because of this shift, American chemical companies began to support international regulation that would then “level the playing field” and stop foreign companies from using the cheaper ODSs for their competing products (Benedick 1991, 31). They realized that this regulation would create a market for substitutes that only large, wealthy corporations could develop, and since the major American corporations had already started developing these alternatives, they recognized that international regulation would give them a long-term advantage (Schreurs 1997, 75). This support gave legitimacy to proregulation advocates and made it easier for American legislators and diplomats to champion this regulation at home and abroad. It is clear that business support would not have occurred without pressure from the public, which has also helped to shape environmental legislation. Although politicians do listen to the preferences of businesses, “if enough of their constituents are concerned about an issue, they will usually work to promote those concerns in policy,” as they want to be reelected (Harris 2001, 22). Generally, strong public support is required for the U.S. to take action in global environmental policy initiatives, so environmental groups often spend much of their time lobbying citizens in addition to lawmakers, in an effort to achieve widespread bottom-up pressure (Sussman 2004, 352). The widespread public reaction to the unfolding reality of ozone depletion spurred American leadership on international ODS regulation. As stated before, once the scientific community coalesced around the new theory, “US [sic] consumer response was swift and significant,” which influenced the position of the chemical industry (Schreurs 1997, 75). This response was the result of the “powerful and evocative pictures of ozone depletion simulations [that] appeared in magazines” and “captured the US [sic] public’s imagination” (Schreurs 1997, 75; Benedick 1991, 27). Americans had access to and were interested in the data and results that American scientists, from prominent universities and organizations such as the University of Michigan, NOAA, and NASA, were finding. Because of that, Americans began acting on their environmental concerns (Benedick 1991, 29). Citizens changed their purchasing habits and lobbied their representatives in office, and in this way, “a well-informed public was the prerequisite to mobilizing the political will of governments and to weakening industry’s resolve to defend the chemicals” (Benedick 1991, 5). Until this point, Falkner’s argument fits the narrative of American leadership in creating the Montreal Protocol. However, he underestimates the role of scientific evidence and consensus in strengthening public support and weakening business leverage. Because businesses do not want to appear anti-environmentalist, much of their resistance comes in the form of questioning the scientific evidence and conclusions drawn. Due to this tendency, “the more uncertain the science, the more interest group politics will come into play” (Schreurs 1997, 89). Additionally, people are more likely to care if there seems to be imminent danger to themselves or their way of life, so “robust action by the United States is much more likely if there is clear scientific evidence that the health of Americans or the U.S. economy would be harmed or if there are clear signs that environmental changes are causing substantial human suffering abroad” (Harris 2001, 17). From this perspective, environmental change can be seen more clearly as a matter of national security, which will both increase public pressure for action and induce more reticent public officials to acquiesce. Finally, collaboration between scientists and government officials can be crucial in helping legislators understand what is at stake, which will encourage them to take action (Sussman 2004, 350). The role of science and scientists was pivotal in building public support, degrading industrial opposition, and pushing government officials to stop ozone depletion. None of the widespread public support would have been possible without credible evidence. In particular, “the public announcement during 1985 of the Antarctic ozone hole played an important role in mobilizing public concern” (Young 1994, 44). It is also telling that “the entire public policy debate revolved around the validity of scientific claims and whether those claims were strong and significant enough to pursue active regulation of CFC products,” as it indicates that scientific evidence was the primary point of dissension, not whether or not the proposed risks were worth accepting (Harris 2001, 187). Eventually, after more scientific research, it was widely accepted that damage to the ozone layer would be harmful both to human health and the environment, which was the turning point in creating both a domestic and international coalition that was powerful enough to create the international regulations (Benedick 1991, 22). In addition, collaboration between scientists and government officials was critical in that scientists provided them with clear measures that were needed to prevent further ozone depletion (Benedick 1991, 5). Conclusive scientific evidence was the motor that propelled the U.S. to demand international regulation on ODSs, and without it there will be little incentive for any future environmental regulation. Besides illustrating the conditions necessary for domestic consensus, the Montreal Protocol demonstrates how American hegemony can influence international environmental regime building and how it can preserve American interests for the future. As argued earlier, U.S. leadership is necessary in creating successful international environmental legislation, and the Montreal Protocol was no exception (Ivanova 2008, 59). Because the U.S. emitted the largest amount of ODSs and greenhouse gases, other states would have felt exploited if the U.S. did not participate in ODS regulation (Benedick 1991, 206). Instead, “the US [sic] government set the example by being the first to take regulatory action against the suspect chemicals,” which encouraged other states to participate as well (Benedick 1991, 206). The U.S. went beyond this, however, as they threatened trade restrictions against nations that did not take responsibility for emissions and “made certain that the implications of this threat were not lost on foreign governments, pointing out that there might be a price to pay for not joining in meaningful efforts to protect the ozone layer” (Benedick 1991, 29). The U.S. was able to apply pressure because of the American economy’s “nodal position” that “affords it a unique opportunity to use economic pressure in the pursuit of environmental objectives” (Falkner 2005, 590). Restricting trade with other countries was an asymmetrical threat, as other countries could not individually create the same level of restrictions. In these ways, American hegemony allowed the U.S. to do more to form an international coalition against ozone depletion than any other single nation could have done. Because of American leadership on the treaty, the Montreal Protocol institutionalized American interests for the future, even in a fairly narrow area of regulation. The primary benefit of the U.S.’s role in the Montreal Protocol was that it allowed American chemical companies to have an advantage in the international market, as their greater resources and early research on alternatives allowed them to “capture” the market for the chemicals that replaced ODSs, which gave them a long-term advantage (Benedick 1991, 206). Furthermore, the U.S. established itself as a leader on the issue, ensuring that any future international ozone agreement must be agreed upon with the U.S. This power, though less tangible than the business advantage, guaranteed long-term American influence on the subject and afforded the U.S. the opportunity to shape future regulations in favor of American interests. In this case, besides protecting global human and environmental health, American hegemony secured American interests that would not have been assured otherwise. For environmentalists who want to stop climate change and for policymakers who realize that American power is temporary, the Montreal Protocol, under an analysis similar to Falkner’s, offers the foundation of a plan to institutionalize an American approach to climate change. In order to use American hegemony to create an international treaty that attacks climate change while securing American interests, these environmentalists and policymakers must work to establish certain domestic conditions that will favor multilateralism. There is already government-funded climate change research, but this should be expanded and protected because without scientific evidence, it will be impossible to defend against those who believe international regulation is unnecessary. Without this evidence, it will also be difficult to know which measures will be most effective in alleviating climate change. This information should be widely spread throughout the media and in information campaigns, which will help garner public support. Finally, although adjusting to regulations may be difficult for American companies, it will be much easier for them than for companies in other countries. This perspective should be discussed with major companies, and policymakers should listen to what the central industry stakeholders would like to see in a climate deal. This will help the climate treaty maximize American business interests and win industrial support. Currently, the U.S. is in a unique position in which they are simultaneously in the best position from which to act on environmental issues and powerful enough to ignore environmental issues entirely and suffer few consequences. However, acting now would speed international progress and environmental safety while protecting the U.S.

#### US environmental influence is make or break for 21st century prosperity

Baker et al 20 - James A. Baker III, George P. Shultz, and Ted Halstead, Foreign Affairs, May/June 2020 “The Strategic Case for U.S. Climate Leadership” [https://www.foreignaffairs.com/articles/united-states/2020-04-13/strategic-case-us-climate-leadership] Accessed 2/16/24 SAO

In the United States, the case for greater action on climate change is typically made on environmental grounds. But there are equally compelling economic, geopolitical, and national security rationales for the United States to lead the world on climate policy. Even those who remain skeptical of the environmental urgency of the problem should recognize the overwhelming strategic advantages of U.S. climate action at home and abroad. Those who oppose greater U.S. engagement and ambition have legitimate concerns. These concerns tend to fall into two buckets. The first is economic: the chief worry is that global climate solutions could put the U.S. economy at a competitive disadvantage with its trading partners and reduce American living standards. The second set is geopolitical: some observers wonder why the United States should reduce its own greenhouse gas emissions if other countries won’t do their part. But a well-designed U.S. climate policy can replace national vulnerabilities with major strategic opportunities. We propose here an environmentally ambitious, economically sound, and politically feasible plan that situates the United States at the forefront of a clean energy future, enhances the competitiveness of U.S. firms, and allows all Americans to benefit directly from emission reductions. Such a plan would also speed up and strengthen the United States’ economic recovery once the immediate health concerns from the novel coronavirus outbreak subside. AMERICA’S CARBON ADVANTAGE Consider first the relationship between national climate policy and international competitiveness. Contrary to the traditional perception that more action on climate change would undermine American competitiveness, the lack of a coherent national climate policy now poses a significant risk to U.S. firms. That is because the current rules of global trade effectively subsidize carbon-intensive production overseas and prevent the United States from reaping the economic benefits of its competitive advantage in low-emission manufacturing. The chief competitors to U.S.-based firms in China, India, Russia, and other countries generally operate under lax environmental standards and produce goods in a more carbon-intensive manner. Yet they currently pay no penalty for this. For example, China is now the world’s largest steel manufacturer, even though its average production of steel is more than twice as carbon intensive as the United States’. A similar pattern emerges in a variety of industries: motor vehicles, chemicals, even solar panels and agricultural products. In each case, U.S.-based firms compete on an unlevel playing field because the current rules of the game put them at a competitive disadvantage. Rather than lower U.S. climate ambitions, a better response would be to encourage U.S. trading partners to raise their standards or penalize them for their polluting ways. Further misconceptions exist about technology. Republicans are right to focus on clean energy innovation as the key to reducing carbon emissions. Yet some conservatives seem not to realize that the United States is falling behind in the clean energy race. The innovation coming out of U.S. universities, national labs, and businesses is impressive, but too few of the results are being produced in the United States and too little of it is making its way into commercial applications. Here, too, a comparison with China is revealing. China is now the world’s top producer, exporter, and user of wind turbines, solar panels, and batteries—the essential building blocks of a clean energy economy; the United States is in fourth place, trailing Germany and Japan. China also accounts for 60 percent of global electric vehicle sales, and the country has long-range plans in place to turn itself into the global leader in developing the fuels and cars of the future. The United States cannot remain the world’s foremost power if it is not also its leading energy innovator. Another common misconception is that climate action in the United States is too expensive or risks undermining the U.S. economy. Thanks largely to the shale and fracking revolution pioneered in the United States, market prices for natural gas have fallen by 70 percent since 2008, so the cleanest fossil fuel is now also the cheapest fossil fuel. During roughly the same period, the cost of solar power dropped by nearly 90 percent, and the price of wind power dropped by 70 percent. By capitalizing on efficiency gains and replacing coal with natural gas and solar and wind energy, the United States has cut its greenhouse gas emissions by 12 percent since 2005, all while maintaining a vibrant economy. Although the United States and its trading partners have a long way to go in reducing emissions, a fundamental paradigm shift is occurring. Climate action and economic growth, far from being mutually exclusive, are not only compatible but also increasingly interdependent. The U.S. economy has prospered in recent decades because the U.S. public and private sectors were the first to embrace the communications and information technology revolutions. The transition to clean energy promises equally far-reaching economic advantages. Next-generation renewables and nuclear energy could substantially drive down the per-unit cost of electricity, just as the digital revolution drove down costs in recent decades. That is why China is investing so heavily in these sectors. And that is why the United States could be putting its global economic leadership position at risk if it continues to ignore this transformation. Many corporate leaders have already come to this realization and are pushing for climate action, not just because their customers and shareholders are demanding it but also because of facts on the ground that are affecting their bottom line. The potential domestic economic toll of a warming planet is already difficult to ignore. Greater flooding, storms, wildfires, and droughts harm sectors as varied as real estate and agriculture. Today, taxpayer spending on federal disaster relief is almost ten times what it was three decades ago, after adjusting for inflation. Climate change will exact an ever-greater toll on the U.S. economy over the next several decades if emissions remain on their current course. RISKS TO THE NATIONAL INTEREST The United States’ lack of a coherent climate strategy also threatens its national security and, most important, its position and influence in the international arena. The national security implications of climate change are substantial. New research published in Nature Communications has estimated that rising sea levels will put up to 340 million people at risk of annual flooding or permanent inundation during the next 30 years, largely in Asian mega-cities. The World Bank, meanwhile, has found that increased flooding, as well as food and water insecurity, in Latin America, sub-Saharan Africa, and South Asia alone could generate an additional 51 million to 118 million internal “climate migrants” by 2050. This could profoundly destabilize countries around the world, particularly those with poor governance. As water scarcity gets worse, control over this vital resource will become a growing source of conflict among states. The current tension between Egypt and Ethiopia over the Nile River foreshadows what might come. And the retreat of Arctic sea ice could change the balance of power among China, Russia, and the United States. A relatively ice-free Arctic would not only open vast new mineral riches to China and Russia; it would also alter world trade routes between Europe and East Asia. Competition in today’s multipolar world is characterized less by direct military confrontation among great powers and more by economic and diplomatic rivalry. Seen through this prism, the United States’ lack of a long-term climate strategy harms its ability to promote American interests on a rapidly evolving world stage. ***The United States risks becoming a bystander***, as a prior world order that was overly dependent on Middle Eastern oil gives way to a new one dominated by clean energy. The winner of the emerging clean energy race will determine the economic and geopolitical balance of power for decades to come. The United States faces steep competition in this field. Russia is one of the United States’ main challengers in energy; Moscow has flooded the world with cheap oil and gas through new pipelines and has unveiled a new generation of nuclear plants and fuel agreements with developing countries. Each such investment creates closer geopolitical relationships. Meanwhile, China and India are making major investments in renewable energy technologies (as well as coal-fired electricity). China, already a leading manufacturer of solar and wind technology, seeks to dominate the coming transformation in energy storage and delivery, as well. At the same time, a lack of economic incentives to reduce carbon emissions in China, India, and other developing countries has resulted in an uneven playing field that forces carbon-efficient U.S. and European companies to compete directly with rivals that have far weaker environmental standards. The lower energy-production costs in developing countries lure global firms away from the United States and Europe. China is adding to the competition by promoting carbon-intensive industrialization in other emerging economies, often powered by new coal plants built through its Belt and Road Initiative. Such investments risk saddling poorer countries with rising carbon emissions. As if that were not enough, China and other emerging economies export their more carbon-intensive goods to the United States in what amounts to “carbon dumping.” The European Union poses a different kind of challenge. For the past 15 years, the EU has limited emissions through a trading system that allows companies to emit greenhouse gases based on the number of allowances they have purchased within a limited, or capped, marketplace. It is now dramatically expanding its climate-related regulations and planning to tax energy-intensive imports. The United States and the European Union should be working together to defend their collective advantage over more carbon-intensive competitors. Unfortunately, the regulatory burden Europe already imposes on U.S. firms will soon increase as the EU adopts tougher measures to combat climate change, sharpening transatlantic rivalries and reducing the opportunities for collaboration. If Washington wants to avoid accepting new rules imposed by other countries, it should step up and set its own. Specifically, the United States needs to become the global front-runner in clean energy technologies and forge a U.S.-led climate alliance to advance its national interest. The country has everything to gain from positioning itself, as it so often has, at the head of the table.

#### US influence avoids extinction

Belfield 23 - Haydn Belfield, In the Book “How Worlds Collapse” Published 2023 “Collapse, Recovery, and Existential Risk” [https://www.taylorfrancis.com/chapters/edit/10.4324/9781003331384-6/collapse-recovery-existential-risk-haydn-belfield] Accessed 2/16/24 SAO

Democracies dominate contemporary global society. By “dominate” I mean that a majority of the world’s population lives in them (Roser, 2019), they form the majority of states (Magaloni & Kricheli, 2010), and perhaps most importantly, they have by far the preponderance of economic, “soft,” and military power (IISS, 2020). However, the world could instead be dominated by authoritarian or totalitarian regimes. I will focus in particular on totalitarian regimes, as they are the most concerning and make my argument clearest. 4.3.3.1 Why Could It Be Worse? A world dominated by totalitarian states would be more incompetent, more war-prone, less cooperative, and more inhibitive of progress than one dominated by democratic states. Our current world is not particularly competent, peaceful, cooperative, or progressive—a totalitarian-dominated world would be worse. It would increase the risk of another collapse and extinction and could shape the future toward less desirable trajectories (Beckstead, 2013). Totalitarian states are incompetent. They are bad at forecasting and dealing with disasters (Caplan, 2008).16 This can be seen most clearly in the great famines of Communist China and the USSR, in which millions died (Applebaum, 2017; Becker, 1996; Dikötter, 2010; Snyder, 2010). In comparison, functioning multiparty democracies rarely, if ever, experience famines (Sen, 2010). “Established autocracies” (or “personal”/“sultanist”) are particularly bad, as there are few checks or restraints on arbitrary rule and the whims and ideology of the single individual, even from other elites (Svolik, 2012). From the inside, the “inner circle” around Mao, Stalin, and Hitler seems incredibly chaotic, with elites strongly incentivized to conceal information and encouraged by the autocrat to squabble and feud—so they are divided (Conquest, 1992; Kershaw, 2008; Zhang & Halliday, 2006). If totalitarian states are worse at addressing social, environmental, and technological problems, then a world dominated by them would likely be worse at responding to risks of collapse and extinction. A world dominated by totalitarian states is more likely to have major wars. States with near-universal adult suffrage rarely (if ever) go to war with one another (Barnhart et al., 2020), so a world dominated by democracies has fewer wars. Miscalculation might be a particular problem for totalitarian states due to personalization and disincentives for accurate information, leading to well-known strategic disasters such as Hitler and Stalin’s blunders in World War II (Bialer, 1970; Noakes & Pridham, 2001), or at a smaller level, Saddam Hussein’s rejection of diplomacy (Atkinson, 1993). War makes collapse and extinction more likely, by raising the chance of weapons of mass destruction being used. Linked to this, totalitarian states are less cooperative than democratic states. While cooperation is possible (Ginsburg, 2020), their internal norms are characterized by paranoia and treachery, and their lack of transparency limits their ability to credibly commit to agreements. This is bad for all risks that require cooperation such as pandemics or climate change (Tomasik, 2015). Finally, continued social and scientific progress is likely to reduce risks of collapse and extinction. Social progress could reduce global inequality and other risk factors. Scientific progress could help address natural risks and climate change (Sandberg, 2018), differentially increase defensive rather than offensive power (Garfinkel & Dafoe, 2019), and solve safety challenges in AI or biotechnology (Russell, 2019). However, as we will now discuss totalitarian states would likely inhibit social progress. A central question from a longtermist perspective is: Which values should shape the future? I would argue that we should prefer it to be shaped by liberal democratic values. This is not to say that the current democracy-dominated world is perfect—far from it. The fate of billions of factory-farmed animals or hundreds of millions of people in extreme poverty makes that abundantly clear. However, democracies have two advantages. First, democracies have space for cosmopolitan values such as human rights, plurality, freedom, and equality. These are better than those that characterize life under totalitarianism: Fear, terror, subjection, and secrecy. Second, they have within themselves the mechanism to allow progress. In the last 100 (or even 50) years, the lives of women, LGBT people, religious minorities, and non-white people have dramatically improved. Our “moral circle” has expanded, and could continue to expand (Singer, 1981). The arc of the moral universe is long, but given the right conditions, it might just bend toward justice (King, 1968). A global society dominated by these values, and with the possibility of improving more, has a better longterm potential. A totalitarian-dominated world, on the other hand, would reduce the space for resistance and progress—distorting the human trajectory. We should be particularly concerned about “bottlenecks” at which values are particularly important—where there is a risk of “locking-in” some particular set of (possibly far from optimal) values. While they are currently faroff, future technologies such as artificial general intelligence, space settlement, life extension (of autocrats), or much better surveillance could enable lock-in (Caplan, 2008).17 Conditional on them avoiding new catastrophes, world orders dominated by totalitarians could be quite long-lasting (Caplan, 2008). Democracies can undermine authoritarian and totalitarian regimes through the following ways: Control, including conquest; contagion through proximity; and consent, promoting receptivity toward democratization (Whitehead, 2001). Democracies can actively undermine these regimes through war, sanctions, hosting rebellious exiles, or sponsoring internal movements. Passively, through contagion, they offer a demonstration that a better, more prosperous life is possible. For example, in the final years of the USSR, ordinary Soviet citizens were able to see that the West had a higher standard of living—more innovation, more choice, and more consumer goods. The elites were able to read books from the outside, and travel—Gorbachev’s contacts and friendships with European politicians may have made him more favorable to social democracy (Brown, 1996). Democracies can undermine the will and capacity of the coercive apparatus (Bellin, 2004). However, in a world not dominated by democracies, all these pressures would be far less. A world in which, say, totalitarian regimes emerged as dominant after World War II (for example if the USA was defeated) could be self-reinforcing and long-lasting, like the self-reinforcing relationship of Oceania, Eurasia, and Eastasia (Orwell, 1949). Orwell’s fictional world is characterized by constant low-grade warfare to justify emergency powers and secure elites, and with shifting alliances of convenience as states bandwagon and balance, thereby preventing any resolution. A totalitarian-dominated world order could be rather robust, perhaps for decades or even centuries. A long-lasting totalitarian-dominated world would extend the period of time humanity would spend with a heightened risk of collapse or extinction, as well as increased potential for distortion of the human trajectory and the possibility that a “lock-in” event may occur. This example illustrates the possibility of a “negative recovery,” resulting in a trajectory with less or no scientific and social progress and a less favorable geopolitical situation, which would threaten the destruction of humanity’s longterm potential.

### Infertility

#### Single use plastics create microplastics.

Brown 23 - Tyson Brown, National Geographic, Last Updated October 31, 2023 “Microplastics” [https://education.nationalgeographic.org/resource/microplastics/#] JWU 1/15/24

Primary microplastics are tiny particles designed for commercial use, such as cosmetics, as well as microfibers shed from clothing and other textiles, such as fishing nets. Secondary microplastics are particles that result from the breakdown of larger plastic items, such as water bottles. This breakdown is caused by exposure to environmental factors, mainly the sun’s radiation and ocean waves. Some of this environmental pollution is from littering, but much is the result of storms, water runoff, and winds that carry plastic—both intact objects and microplastics—into our oceans. Single-use plastics—plastic items meant to be used just once and then discarded, such as a straw—are the primary source of secondary plastics in the environment. Microplastics have been detected in marine organisms from plankton to whales, in commercial seafood, and even in drinking water. Alarmingly, standard water treatment facilities cannot remove all traces of microplastics. To further complicate matters, microplastics in the ocean can bind with other harmful chemicals before being ingested by marine organisms.

#### Microplastics cause infertility led extinction

Rozsa 21 - Matthew Rozsa, Salon, April 4th, 2021 “How plastics are making us infertile — and could even lead to human extinction” [https://www.salon.com/2021/04/04/plastic-pollution-infertility-extinction/] Accessed 1/23/24 SAO

Climate change is rightly cited as an environmental crisis that could lead to human extinction. Yet there is another pollution issue, indirectly related, that could make it literally impossible for human beings to reproduce. I am talking, of course, about plastic pollution. Dr. Shanna Swan, a professor of environmental medicine and public health at Mount Sinai School of Medicine in New York City, has a new book out called "Count Down: How Our Modern World Is Threatening Sperm Counts, Altering Male and Female Reproductive Development, and Imperiling the Future of the Human Race." In it she describes how various chemicals commonly found in plastic products are leading to a decline in fertility. The most striking example of this is in dropping sperm counts; if you have fewer than 15 million sperm per milliliter of semen, you are considered to have a low sperm count. Human beings are rapidly reaching that point, as Swan demonstrates in her book. Salon spoke with her about this issue over the phone; as always, this interview has been edited for length and clarity. What is the thesis of your book? The thesis of my book is that reproductive health in men and women has been declining dramatically at least over the past 40 years, and that a major part of that decline is linked to everyday exposure to chemicals in the environment that can affect our hormone system. There's a lot in there and we can spread that all out, but that's the overall thesis. There has been this downfall, if you will, a decline in reproductive health in many aspects. It impacts men and women. And if you look to the causes, a major cause — although not the only cause — is the presence in our daily lives of chemicals that are hormonally active. What is an endocrine disruptor and what are the tangible effects that we have seen it have on, for instance, sperm counts or important aspects of female reproductive health? First of all, an endocrine disruptor is a chemical that impacts the body's endogenous natural hormone function. And by impact, it could be increases, slows, or interferes with in various ways. The most profound way they do that is by disturbing prenatal development so that the exposure to the pregnant woman early in pregnancy is going to have the biggest impact on later reproductive health and function in the offspring. I know that there has been a drop in sperm counts since the 1970s. Could you elaborate a little more on the data there? It took two years of seven people working pretty hard on this to get the simple fact that sperm concentration dropped between between 1973 and 2011 from 99 million per milliliter to 47 million per milliliter. That's the work that went into that one sentence. Those kind of data are not available for any other outcomes. They're just not. It's just this combination of consistency of method. And by the way, that's the numbers for Western men. I should say that we divided the studies further into four categories. One of them was geographic. One of them was the kind of man it was. So we separated Western men from non-Western men. And Western was Europe, North America, Australia, New Zealand — all this is in the paper, of course. And the reason we did that is because the studies from other countries were different in many ways, including when they were published. Statistically it was more appropriate to separate them. When we did that, we saw there were very few studies in non-Western countries, not enough to really draw any conclusion. So what I told you with those numbers, that's Western studies. And the other countries, as I say, the numbers are too small to draw a conclusion. Then we further divided the men into two big categories. One is, were they partners of pregnant women? Were their partners pregnant, or had they fathered a child? Those are the fathers, that's the group we called fertile men. And the reason we separated them is because they cannot demonstrate the same kind of decline because if their count was sufficiently low, they would not be fathers. So just being a father selects you into a certain category as sperm count. We also see declines in testosterone in several studies around the world. We see increases in erectile dysfunction. We see increases in rates of genital abnormalities. There is quite a lot of data on that. We see increases in testicular cancer rates. We see increases, on the female side, in diminished ovarian reserve, which means that a woman does not have as many eggs left when she gets older as she might need to conceive. An increase in miscarriage, but perhaps the most important after sperm count is fertility. Fertility is a complicated metric, but what's usually thought of as fertility and what's published by the World Bank is the number of children that a couple has, simply the number of children born. And that number has dropped 50% between 1960 and 2018 . . . So then you ask, what could be causing this? And before I go to the chemicals, I want to say, we're not dismissing the many, many lifestyle factors that can influence reproduction and sperm count. There are things like smoking, binge drinking, obesity, stress, poor diet, et cetera. Those things would not entirely explain this decline because they haven't been increasing at overall at the same rate, whereas the production of chemicals — and particularly the production of plasticizers and plastic products — has been actually even faster than the 1% per year [decrease in fertility]. So it's actually been exponential. Let's turn to those chemicals. So why did I look at the chemicals I looked at? I looked at phthalates particularly, and bisphenols secondarily, and then other chemicals that other people are looking at. The reason I focus on these chemicals was, like I told you, these chemicals have a direct action on the steroid hormones, and the steroid hormones are critical for proper development during pregnancy. So I have to talk a little bit more about the science, because otherwise it doesn't make any sense. So in utero, in the womb, the fetus is developing first from obviously a few cells. And then pretty soon there is something called the genital ridge. It's, what's going to become the genital tract. It's just a single ridge. It's the same in boys and girls, not differentiated. So that's the undifferentiated state of the genitals. Then how does it become male typical and female typical? Well, it needs testosterone in the male. So the male has to have enough testosterone at a certain time, a delicately programmed time, by the way, genetically programmed, which is in the first trimester. And then when the testosterone is present made by the fetal testes, then the male genitals starts to develop in the male typical way that we expect. That's what's expected in an XY individual in a genetic male, and that male will develop it as usual, and then if all is good, he'll have adequate sperm count and he'll be fertile and he'll not have genital birth defects and he'll not develop testicular cancer and all these things that can happen when there isn't enough testosterone. And the female, by the way, is going along her programmed route, developing in the female typical way, but she doesn't need testosterone for that because she's just going along with her tract and doesn't have a lot of testosterone. If she sees too much testosterone, then she will start getting a development that's more male typical. Want more health and science stories in your inbox? Subscribe to Salon's weekly newsletter The Vulgar Scientist. So phthalates are, first of all, everywhere. They're in everybody. The CDC has shown that since about 2000 over 95% of the population has one or more phthalates [in their bodies], and many of them are measured regularly by the CDC. So they're all pervasive. You don't know how much you have. I don't know. The only way we can know is to get our urine tested. And what it's tested for is a urinary metabolites, because phthalates are thankfully short, they're called non-persistent, they're only in the body for a short time. So the half-life is four hours. So these things come into the body and then leave quickly. And that's great. What's not so great is that they're coming in all the time because there's so many sources of exposure. So major sources of exposure for phthalates are food. That's probably the primary source. And that seems kind of counterintuitive. How would they get in the food? They get in the food in every way you can think of from the time the food is grown, because they're actually in pesticides, to when it comes on our plate. So if you will, farm to fork, they can get in anywhere along that path. Another thing that phthalates do is they make cosmetics and personal care products more useful because they increase absorption into the skin. They increase the retention of color, which is great for nail polish and lipstick. And they hold odor, so anything fragrant has phthalates. We showed that by asking women, "what products did you use in the last 24 hours?" We got that information, looked at the phthalates in their urine, and sure enough, there was correlation between what products they use and what was in their urine. So it's definitely coming from personal care products. Similarly, you can show it's coming in cleaning products — it's coming from the floor coverings that have polyvinyl in them, because it's a major contaminant of polyvinyl chloride. Wall coverings. Your garden hose, which is made him polyvinyl chloride. A soft shower curtain. Anything in your home that is soft plastic or polyvinyl chloride, which is not soft, will emit phthalates. So you can see that we can't escape them. They're not labeled, we can't shop our way out of this by avoiding them because we don't know where they are. So this is what we say this is an everywhere, every time chemical. Other chemicals that people should worry about. . . I talked about phthalates, which makes plastic soft. Bisphenols make plastic hard. There's this Bisphenol A, there is Bisphenol S, there are many of them, and these are a class of chemicals that make plastics hard. They also are used for many other purposes. Like lining tin cans. They're in a majority of a cash register receipts. They're in various kinds of paper products, such as pizza boxes. They're also unavoidable and they have a different property. They have the property of being estrogenic. They apparently increase estrogen in the body, and that has a lot of reproductive effects as well. What kind of policies could actually reduce the damage that has already been done, remove these plastic products from our lives, and then prevent us from being exposed to other dangerous chemicals in the future? Well, that's an enormous agenda, isn't it? I think the first step to get this accomplished, which I think has to be accomplished, is that people have to be aware of the problem — which by the way, if you look at the analogy to climate change, that hadn't happened for a long time. This hasn't happened for a long time. This book, and this paper, the 2017 paper, were a wake-up call. And the book is being widely recognized as talking about a problem that we have to consider now. And I think opening people's eyes on their own, to the urgency of this and making this relevant to everybody, is the first step. Because if people don't feel impacted, why should they do anything? And for a long time, people didn't recognize an impact at all. As with climate change, there is the possibility that citizens can bring pressure on governments to start taking action. Those actions I see are twofold. One is that, as I mentioned, the chemical industry has to change what they are producing. They won't do that without being forced to, so there will have to be regulations that are implemented. There's many that are not properly implemented. And new ones have to be made to ensure that we do not produce hormonally active chemicals, particularly those that are harmful at low doses.

#### Now is Key

Brokovich 21 – Erin Brokovich, American legal clerk and environmental activist, March 18th 2021 “The Guardian: Plummeting sperm counts, shrinking penises: toxic chemicals threaten humanity” [https://www.theguardian.com/commentisfree/2021/mar/18/toxic-chemicals-health-humanity-erin-brokovich] JWU 1/20/24

The end of humankind? It may be coming sooner than we think, thanks to hormone-disrupting chemicals that are decimating fertility at an alarming rate around the globe. A new book called Countdown, by Shanna Swan, an environmental and reproductive epidemiologist at Icahn School of Medicine at Mount Sinai in New York, finds that sperm counts have dropped almost 60% since 1973. Following the trajectory we are on, Swan’s research suggests sperm counts could reach zero by 2045. Zero. Let that sink in. That would mean no babies. No reproduction. No more humans. Forgive me for asking: why isn’t the UN calling an emergency meeting on this right now?

### Sustainable Ag

#### Big agriculture dominates the industry through agro-chemicals that boots yields in the short term

Aronov 21 – Shely Aronov, Forbes, 9/30/21 “Big Seed” Is Failing, And Farmers Need A Plan B, https://www.forbes.com/sites/forbestechcouncil/2021/09/30/big-seed-is-failing-and-farmers-need-a-plan-b/?sh=59599e6b6f75 JWU 1/15/24

Here's how the Big Seed shell-game works: Companies use genetic engineering to create herbicide-resistant seeds and then sell those seeds along with the herbicides they tolerate. Farmers can kill weeds without damaging their crops, boosting their yields and making it almost impossible for farmers who aren't using these technologies to compete. So far, so good — but soon, weeds develop resistance to the herbicides. The yields stop increasing, and farmers are forced to buy new seeds designed to tolerate additional kinds of herbicides. The story repeats, and soon, farmers are spraying their fields with three, four or even five different chemicals simply to keep the weeds at bay. Essentially, Big Seed has traded innovation for iteration; as long as it keeps on creating seeds with "stacked resistance" to a lengthening list of herbicides, it has a captive market for its products. Farmers, meanwhile, are left using more and more chemicals — also bought from Big Seed — simply in order to maintain their yields. Researchers call this the "pesticide treadmill" because it leaves farmers running to stay in the same place — and once you're in motion, it's very hard to stop. Worse still, you can't keep on stacking herbicides indefinitely. The cost of chemicals keeps on rising, as does the cost of seeds. Meanwhile, yields have stagnated, and farmers are being forced to sell their harvests for less than the cost of production. With pesticides and herbicides also degrading soil and water resources, it's clear that neither the economics nor the environmental cost of endlessly increasing chemical usage can be sustained over the long term. At some point, the wheels will come off the pesticide treadmill.

#### That requires single use plastics

Erickson 19 – Britt E. Erickson, 2019, C&EN “Stop delivering agrochemicals with microplastics, group says” [https://cen.acs.org/environment/pesticides/Stop-delivering-agrochemicals-microplastics-group/100/i19] JWU 1/15/24

Agrochemical producers use microplastics to encapsulate and slow the release of nutrients and active ingredients in their formulations. For controlled-release fertilizers, manufacturers often use a polymer material such as polyolefin or polyvinylidene chloride as a coating, according to the report. Similarly, pesticide makers often use hollow, micrometer-size spheres made from polyureas or other polymers to encapsulate active ingredients.

#### A ban wrecks industrial ag

Oakes 22 – Kelly Oakes, BBC 2022 “What would happen if we stopped using plastic?” [https://www.bbc.com/future/article/20220526-what-would-happen-if-we-stopped-using-plastic] JWU 1/15/24

In some ways, though, changing food packaging would be the easy part. You might buy milk in a glass bottle, but plastic tubing is used in the dairy industry to get that milk from cow to bottle. Even if you buy vegetables loose, sheets of plastic mulch may have helped the farmer who grew them save water and keep away weeds. Without plastic, industrial agriculture as we know it would be impossible. Instead, we'd need shorter food chains – think farm shops and community-supported agriculture. But with over half of the global population now living in cities, this would require huge changes in where and how we grow food. It wouldn't be an impossible task, says Iacovidou, but "we have to devote the time to do it, and we have to also cut the amount of things that we eat".

#### Reject corporate propaganda. We have plenty of food to soften a transition now

Latham 15 - Jonathan Latham PhD, writing for Independent Science News, January 12th 2015 “How the Great Food War Will Be won” [http://www.independentsciencenews.org/environment/how-the-great-food-war-will-be-won/] Accessed 2/16/24 SAO

By conventional wisdom it is excellent news. Researchers from Iowa have shown that organic farming methods can yield almost as highly as pesticide-intensive methods. Other researchers, from Berkeley, California, have reached a similar conclusion. Indeed, both findings met with a very enthusiastic reception. The enthusiasm is appropriate, but only if one misses a deep and fundamental point: that even to participate in such a conversation is to fall into a carefully laid trap. The strategic centrepiece of Monsanto’s PR, and also that of just about every major commercial participant in the industrialised food system, is to focus on the promotion of one single overarching idea. The big idea that industrial producers in the food system want you to believe is that only they can produce enough for the future population (Peekhaus 2010). Thus non-industrial systems of farming, such as all those which use agroecological methods, or SRI, or are localised and family-oriented, or which use organic methods, or non-GMO seeds, cannot feed the world… The real food crisis is of overproduction. Yet this strategy has a disastrous foundational weakness. There is no global or regional shortage of food. There never has been and nor is there ever likely to be. India has a superabundance of food. South America is swamped in food. The US, Australia, New Zealand and Europe are swamped in food (e.g. Billen et al 2011). In Britain, like in many wealthy countries, nearly half of all row crop food production now goes to biofuels, which at bottom are an attempt to dispose of surplus agricultural products. China isn’t quite swamped but it still exports food (see Fig 1.); and it grows 30% of the world’s cotton. No foodpocalypse there either… Anyone who wants a sustainable, pesticide-free, or non-GMO food future, or who wants to swim in a healthy river or lake again, or wants to avoid climate chaos, needs to know all this. Anyone who would like to rebuild the rural economy or who appreciates cultural, biological, or agricultural diversity of any meaningful kind should take every possible opportunity to point out the evidence that refutes it. Granaries are bulging, crops are being burned as biofuels or dumped, prices are low, farmers are abandoning farming for slums and cities, all because of massive oversupply. Anyone could also point out that probably the least important criterion for growing food, is how much it yields. Even just to acknowledge crop yield, as an issue for anyone other than the individual farmer, is to reinforce the framing of the industry they oppose… So, if one were to devise a strategy for the food movement, it would be this. The public already knows (mostly) that pesticides are dangerous. They also know that organic food is higher quality, and is far more environmentally friendly. It knows that GMOs should be labeled, are largely untested, and may be harmful. That is why the leaders of most major countries, including China, dine on organic food. The immense scale of the problems created by industrial agriculture should, of course, be understood better, but the main facts are hardly in dispute. But what industry understands, and the food movement does not, is that what prevents total rejection of bland, industrialised, pesticide-laden, GMO food is the standard acceptance, especially in Western countries, of the overarching agribusiness argument that such food is necessary. It is necessary to feed the world. But, if the food movement could show that famine is an empty threat then it would also have shown, by clear implication, that the chemical health risks and the ecological devastation that these technologies represent are what is unnecessary. The movement would have shown that pesticides and GMOs exist solely to extract profit from the food chain. They have no other purpose. Therefore, every project of the food movement should aim to spread the truth of oversupply, until mention of the Golden Fact invites ridicule and embarrassment rather than fear

#### That prevents genetic consolidation

Sheild 21 – Charli Sheild, Deutsche Welle, 2021 “DW: Who controls the world's food supply?” [https://www.dw.com/en/agriculture-seeds-seed-laws-agribusinesses-climate-change-food-security-seed-sovereignty-bayer/a-57118595] JWU 1/15/24

All that changed in the 1990s when laws were introduced to protect new bioengineered crops. Today, four corporations — Bayer, Corteva, ChemChina and Limagrain — control more than 50% of the world's seeds. These staggering monopolies dominate the global food supply. "Seeds are ultimately what feed us and the animals we eat," Jack Kloppenburg, a rural sociologist and professor at the University of Wisconsin-Madison, said. "Control over seeds is, in many ways, control over the food supply. The question of who produces new plant varieties is absolutely critical for the future of all of us. Some worry that heirloom crops, such as these potatoes from Peru, could disappear, meaning less genetic diversity Seeds themselves are becoming less diverse. According to the UN Food and Agriculture Organization, 75% of the world's crop varieties disappeared between 1900 and 2000. A huge wealth of locally adapted crops is being replaced by standardized varieties. And experts warn that could have grave consequences for food security — especially as the planet heats up.

#### Loss of genetic diversity causes extinction

Feliciano 11 - Meghan Marrinan Feliciano, 2011, University of St. Thomas Law Journal [http://ir.stthomas.edu/cgi/viewcontent.cgi?article=1265&amp;context=ustlj] JWU 1/19/24

While many may ponder the consequences of global warming, perhaps the biggest single environmental catastrophe in human history is unfolding in the garden. While all are rightly concerned about the possibility of nuclear war, an equally devastating time bomb is ticking away in the fields of farmers all over the world. Loss of genetic diversity in agriculture – silent, rapid, inexorable – is leading us to a rendezvous with extinction – to the doorstep of hunger on a scale we refuse to imagine. . . . Reducing the diversity of life, we narrow our options for the future and render our own survival more precarious.1Around the world, an amazing array of plants have been cultivated and developed over many thousands of years, adapting to diverse climates and evolving to withstand various diseases and pests. The genetic resources found in the germplasm of these plants are invaluable, as these diverse traits offer the means for plants to survive and thrive under a multitude of conditions. Today, crop genetic diversity is at great risk, and its diminishing existence threatens the sustainability of the world’s food supply. The danger is real: between 1903 and 1983, more than 95% of U.S. tomato varieties were lost. If we want tomatoes, as well as other crops, to remain on the table, we must act to preserve the diverse genetic resources found in agriculture around the globe.

## Taiwan Tech K Aff Case

### Framework

#### You should prioritize reducing American Imperial policies regardless of potential consequences. We have an obligation as citizens in an Empire to reject imperial propaganda and hold our own government accountable

Avakian 22 - Bob Avakian, Revolution, February 25, 2022 “Shameless American Chauvinism: “Anti-Authoritarianism” as a “Cover” for Supporting U.S. Imperialism” [https://revcom.us/en/bob\_avakian/shameless-american-chauvinism-anti-authoritarianism-cover-supporting-us-imperialism] Accessed 1/26/23 SAO

In recent years, there has been lot of talk, and a lot written, about the growing danger of “authoritarianism” in the U.S., as represented by Donald Trump and the Republican Party. Now, in the context of Russia’s invasion of Ukraine, and U.S. moves in response to this, there is the spectacle of a number of supposed “experts” on “authoritarianism” rallying around the flag of U.S. imperialism in the face of the challenge to its dominance posed by Russia, with China lurking as perhaps an even more serious challenge. (Russia and China have not been “communist” for a long time—and instead have, for decades, been capitalist-imperialist countries and, as such, represent a significant challenge to the imperialist interests of the U.S.) If we listen to these “experts,” the powerful force with imperial ambitions that we should be most concerned about now is Russia and its “authoritarian” leader, Vladimir Putin. Suddenly, the expression of high-minded principle about how wrong and dangerous it is for one country to invade another, on the basis of flimsy pretexts and outright lies, applies only to Putin (and, of course, to other “authoritarians” that “we” do not like), and most certainly not to “us.” Certainly, the big power bullying and aggression by Russia, with its invasion of Ukraine a clear example, is something that all decent people should oppose. But no decent person should be joining in with the U.S. imperialists in their rivalry with Russian imperialism. For reasons I will get into here, it is utter, disgusting hypocrisy for the U.S. imperialists, and their media mouthpieces and other representatives, to be self-righteously condemning this Russian invasion, when the U.S. is the country which has, by far, carried out the most invasions and other acts of violent interference in other countries. Somehow, these “learned people” have “forgotten” about the U.S. invasion and occupationof another “sovereign country,” Iraq, in 2003—on the basis of flagrant lies about Iraq supposedly possessing “weapons of mass destruction” and being closely linked with Islamic fundamentalist terrorists like Al Qaeda. This U.S. invasion was a blatant international war crime, which set in motion events which have cost the lives of hundreds of thousands of people, created millions of refugees, and unleashed a maelstrom of death and destruction in that part of the world. (One of the most disgusting spectacles on the “mainstream” media these days, such as CNN, is the presence of government officials who are “veterans” of this U.S. war crime in Iraq, and who arrogantly denounce the Russian invasion of Ukraine as the illegal act of a powerful country aggressing against a weaker country! Somehow, the outrageous irony of these American war criminals denouncing the war crimes of others is “lost” on, or deliberately ignored by, these media.) Somehow, these “experts” are ignorant of (or they are deliberately ignoring) the fact that the U.S. by far holds the record for violently interfering in the affairs of other countries: In addition to the continuing crimes against humanity carried out by the U.S., just since World War 2, including the U.S. slaughter of millions of civilians in Vietnam, and before that in Korea, and the bloody coups it has engineered in Indonesia, Iran and elsewhere, in the period from 1846 to the present the U.S. has intervened in South and Central American countries—militarily, through CIA coups, or in other ways—at least 100 times, at the cost of literally hundreds of thousands of deaths and endless misery for the people of those countries. Somehow, these “enlightened historians” have lost sight of the fact that the country they are living in (the “good old USA”) established, and repeatedly expanded, its territory on the basis of predatory violence on a massive scale, including genocidal “military campaigns” against the indigenous peoples of this continent (repeatedly breaking treaties in the process), and an expansionist war of aggression which resulted in ripping off a huge part of the territory of Mexico, in the middle of the 19th century, largely for the purpose of expanding slavery. And, after all, this is a country where a “manifest destiny” was declared—to conquer territory “from sea to shining sea” (and beyond). American Chauvinism and the Uses and Misuses of “Authoritarianism” The notion of “authoritarianism,” as wielded by these “scholars,” “pundits,” and others, is a misleading concept, which serves American imperialist interests and promotes American chauvinism (the sickening belief in the superiority of Americans and “the American way of life”). “Authoritarianism,” in itself, has no particular ideological, political or social content, and in fact serves to cover over or obscure actual social, political and ideological content. For example, to refer to Donald Trump and the Republican Party as “authoritarians” makes it seem as if what defines them is simply the urge to ill-gotten and tyrannical power. It tells you nothing about what they are seeking to do with that power—what ideology and what political and social program they are upholding and seeking to implement and enforce. The fact is that they are fascists—which has a very definite content: hatred and violent suppression of Black people and other people of color, immigrants, women and LGBT people, unrestrained plunder of the environment, grotesque American chauvinism, crude anti-intellectualism and anti-scientific lunacy. Refusing to call these fascists what they actually are—and instead just referring to them as “authoritarians”—serves a number of objectives, all in line with American chauvinism. First, it covers over the fact that these fascists have been bred by the system that has ruled in this country, from the days of slavery to the present, with blatant inequality and blood-soaked oppression poured into its foundation and its ongoing functioning. This has been nurtured by the putrid and poisonous soil of this country—a country that, from the start, has regarded and treated Black people as sub-human beings created by “god” to be beasts of burden, or destined by their “nature” to become dangerous criminals; women as lesser beings, fit only to be subordinate servants of men, objects of their sexual domination and mere breeders of their children; and LGBT people as essentially non-human “deviants.” Forcefully imposing a situation where that is the unchallenged state of things is the fanatical passion and goal of the fascists. And, since these fascists have indeed sprung forth out of the soil of this country, what does that say about this country: how is it then possible to maintain the farcical notion of “American exceptionalism,” the idea that there is something “exceptionally good” about this country?—a notion that the actual history, and present reality, of this country shatters to pieces and reveals as vile mockery—which is why so many “historians” and “scholars” do not want to really, scientifically examine this history and reality. Second, speaking of “authoritarianism,” without reference to the actual ideology and political and social content of the “authoritarians,” allows for the pretense that “extremists” of the “right” and the “left” are essentially the same. Thus, with the label of “authoritarianism,” communists can be thrown into the same camp of “very bad people” with fascists—when, in reality, communists are the exact opposite of, and the force most fundamentally opposed to, fascism. This can be readily seen through any objective, scientific analysis of the ideological outlook and aims of genuine communists, who, on a scientific basis, stand for and are fighting for the abolition of all exploitative and oppressive relations, while the fascists are fanatically determined to impose the most horrific expressions of these very relations, and seek to justify this with all kinds of lunatic conspiracy theories and anti-scientific distortions of reality.1 And this notion of “authoritarianism of the left and right” serves to propagate and perpetuate American chauvinism in this way: If the problem and danger is “authoritarianism,” of the left, as well as the right, then of course, according to this perverted logic, it is “American democracy” that is the “center”—the center of all that is good and righteous—in opposition to the evils of “authoritarianism.” Here we are back to what I have referred to previously as the GTF, the Great Tautological Fallacy, the “round and round in a circle argument” that America is a force for good in the world—and whatever it does is good, or at least done with “good intentions,” because America is... a force for good.2 This GTF is a “great escape mechanism” for all these anti-authoritarian “historians” and other American chauvinists, allowing them to explain away (or neglect as irrelevant or insignificant) the horrific crimes committed by this country throughout its history, and down to today, to which I have referred in this article. “We may have founded a country on slavery and genocide,” some might admit; but, they insist (while ignoring or discounting the life-stealing, soul-crushing oppression to which masses of people are subjected day after day) “we have been continually moving toward a more perfect union.” “We may carry out wars of conquest, invasions, coups, and other acts of violent interference in the affairs of other countries”; but, they claim, “We do this for some greater purpose, or at least in opposition to some greater evil.” “We may live in the only country that has actually used nuclear weapons”—the atomic bombs that were dropped on two Japanese cities, instantly incinerating hundreds of thousands of civilians, at the end of World War 2—but, the argument goes, “We did this to save lives, especially the lives of American soldiers.” Such are the ridiculous, and outrageous, rationalizations. And now, with Russian, and Chinese, challenges of various kinds to U.S. dominance in the world, the argument of the U.S. ruling class, and those who parrot its American chauvinist rationalizations, amounts to essentially nothing more than this: “We have established, through massive force and violence, an ‘order’ in the world that is favorable to our ‘national’ (that is, imperialist) interests, and no one has the right to use force to change this in a way that threatens those interests.” In short, “we” are the “good guys” in the world, so things “we” do that would be “evil” if others did them are after all “good”... because “we” are the “good guys.” And now especially, a particular variation of this is the claim that, in the rivalry and confrontation between the imperialists of this country, on the one hand, and those of Russia, or China, on the other hand, “we” must stand with “our own” (U.S.) imperialists because the governments of “those” countries are “authoritarian,” while “our” government is not (yet) “authoritarian.” That all this is completely bankrupt, both logically and morally, should be obvious to anyone who is not blinded by the American chauvinist GTF. For those of us who are not willing to be blinded by this, we can and must confront and analyze reality as it actually is, and draw the necessary conclusions. Besides the fact that the U.S. is today, and has historically been, allied with many “authoritarian” governments throughout the world (and, in fact, has forcibly installed such governments in many countries), the even more fundamental fact is that the essence of the conflict between the U.S. and countries like Russia and China is not one between “democracy” and “authoritarianism,” but is a matter of rivalry among imperialist powers, all of which are monstrous oppressors of masses of people, and none of which represent or act in the interests of humanity. What is called for, and urgently now, is to oppose all imperialist marauders and mass murderers, and all systems and relations of oppression and exploitation, while giving particular emphasis to opposing “our own” imperialist oppressors who commit their monstrous crimes “in our name” and seek to rally us to support them on the basis of a grotesque American chauvinism, which we must firmly reject and fiercely struggle against.

#### Prefer our framework additionally

#### [1] Hate Crimes DA: Fear of China excuses catastrophic mismanagement of domestic problems and fuels authoritarianism and racism

Chow 21 - Tobita Chow, director of Justice Is Global, New America, October 5th, 2021 “What America’s Fear of China Really Says About Us” [https://www.newamerica.org/the-thread/what-americas-fear-of-china-really-says-about-us/] Accessed 11/1/24 SAO

The problem goes beyond just Trump and his rhetoric about the pandemic. The underlying cause is the growing policy tensions between the United States and China. History teaches us to expect that this will translate into increased racial tensions within the United States. “When America China-bashes, then Chinese get bashed, and so do those who look Chinese. American foreign policy in Asia is American domestic policy for Asians,” said Professor Russell Jeung, cofounder of Stop AAPI Hate. This pattern repeats throughout U.S. history. In the early twentieth century, Japan’s victory in the Russo-Japanese War triggered fears of a growing Asian threat to the white, Western world, which was then used to build popular support for efforts to ban immigration from Japan and Korea. During World War II, the Korean War, the Vietnam War, the U.S.-Japan trade war, and the War On Terror, Americans’ fear and anger towards racialized enemies fed racism against people in the United States who “looked like” those enemies. Because the majority of Americans are poor at distinguishing between Asian ethnicities, animosity for one Asian country can generate racism against people descended from dozens of other countries in the Asia-Pacific region. Today it is a rise in China-bashing, in particular from U.S. political leaders, that is contributing to a rise in anti-Asian racism. We should be precise about what we mean by “China-bashing.” As Rep. Ilhan Omar has said, “We need to distinguish between justified criticisms of the Chinese government’s human rights record and a Cold War mentality that uses China as a scapegoat for our own domestic problems and demonizes Chinese Americans.” Concerns about racism should not cause us to shy away from legitimate criticisms of the Chinese government’s human rights abuses, the crackdowns on democracy and civil society in Hong Kong, and Chinese military threats to Taiwan and other neighboring countries. These narratives are less likely to feed racism, as the average American racist is unlikely to identify with the plight of the Taiwanese, Hongkongers, or Uyghurs. The real problem is with narratives about how China poses a threat to the United States. They portray China as a source of problems in the lives of Americans, which then feeds racism against anyone who “looks Chinese.” To better understand this, we must examine the growing trend of threat inflation and the effects when these narratives engage in it. For example, in a landmark speech delivered at the Richard Nixon Library last year, Trump’s Secretary of State Mike Pompeo portrayed the threat of China in almost apocalyptic terms. He warned that, “If we bend the knee now, our children’s children may be at the mercy of the Chinese Communist Party,” and claimed that, “Securing our freedoms from the Chinese Communist Party is the mission of our time.” According to Pompeo, the Chinese Communist Party aspires to take over the world, eradicate American freedom, and subjugate the American people. This is an extreme exaggeration of the aspirations of political leaders in China. But it has become common to hear U.S. politicians and other leading figures across the political spectrum say that China is “an existential threat” to the United States or to the entire world. There are a number of reasons why U.S. leaders engage in threat inflation. One important dynamic is the commitment to American exceptionalism and to U.S. military and economic domination over the rest of the world. As the United States seems to be declining in relative power in the world, China is rising out of its previous position as a subordinate country in the U.S.-led global system. For those invested in American exceptionalism, the sense that U.S. global domination may be at risk feels like an attack, in a way similar to how some white people experience threats to white privilege as an attack on white people. In many discussions about China we see an easy slide from the plausible claim that China is a threat to U.S. global hegemony to the implausible claim that China is an existential threat to the United States or a threat to every American. An unquestioned commitment to American exceptionalism can make these two claims seem equivalent. In addition, many leaders seek to turn China into a scapegoat for problems in U.S. society. This is a particularly potent strategy for conservative politicians who oppose measures that would improve living conditions or address injustices within the United States. Trump’s use of the term “Chinese virus” was a way of escaping accountability for his catastrophic mismanagement of the pandemic. Many Republicans, like Pompeo, portray authoritarianism in China as the greatest threat to the American way of life in order to give cover to their own support for authoritarianism in the United States, as they pass laws that disenfranchise American voters and spread conspiracy theories accusing Democrats of stealing elections. Republican strategists aim to rebrand the Republican Party as the party of the working class by equating “anti-China” with “pro-worker,” even as the party opposes reforms such as a $15 minimum wage, or Biden’s American Jobs Plan. These scapegoating tactics have become common within the racist authoritarian movement responsible for the insurrection on January 6. Meanwhile, among liberals and in the Democratic Party, many leaders join in on China bashing in part because they hope to rebuild bipartisanship with Republicans based on anti-China politics. This strategy of anti-China bipartisanship has been used to support economic packages that promote investment in research and technology, infrastructure, and job creation, through arguments that public investment is necessary to confront the threats that China supposedly poses to the United States. However, polling shows that anti-China messaging does not help build popular or bipartisan support for such measures. It does, however, risk contributing to the narratives used by racists and authoritarians. There is no question that the U.S.-China relationship is a source of large and important challenges. But fear-mongering about China distorts the debates we must urgently have about this topic, contributes to anti-Asian racism, and feeds toxic trends within U.S. politics overall.

#### [2] Miscalculation DA: Orientalist narratives cause fatal miscalculations

Lockwood 19 - Katie Lockwood, E-International Relations, March 3rd, 2019 “Is the International System Racist?” [https://www.e-ir.info/2019/03/03/is-the-international-system-racist/] Accessed 4/20/2019 \*bracketed for clarity SAO

The international system is socially constructed (Wendt, 1992: 395), meaning that how we conceptualise the social world has huge implications for reality. Consequently, if perceptions of global politics are filtered through an artificial civilised/uncivilised dichotomy, it will become real, manifesting in the foreign policy decisions of the actors who shape the system. Therefore race does not have to be a biological fact to be a social reality (Castles, 2000: 167) – the system can be ‘racist’ without ‘race’ being objectively real. While racist structures are of central importance, this essay is [does] not seeking to deny the agency of the Global South. Structure is not the all-pervading determinant of behaviour, and the Subaltern always has some agency (Giddens, 1984: 16), but their chances and choices are necessarily delimited in a racist international system. This essay shall adopt a historical perspective in order to expose the continued salience of race in international politics. The role of discourse is also given central importance due to the intimate connection between discourse, knowledge and power (Abrahamsen, 2003: 199-200). In order to demonstrate the racist nature of the international system, this essay shall first depict how racism underwrites the global economy. The influence of race shall then be examined in the context of nuclear weapons, the asylum process, and humanitarian intervention. Finally, the racial construction of terrorism will demonstrate that the international system is racist. The entrenched inequality of the global political economy is predicated upon racism. Until historical wrongs are rectified via reparations (Plessis, 2003: 645), the Global South will continue to be unable to overcome its subjugation, and the global economy’s racist past will continue to cast a shadow on the future. The continued disparity between rich and poor is no accident: the Global North actively perpetuates its advantage. Despite the myth of sovereign equality in international law, the Global South’s sovereignty is undermined by its continued economic dependence (Nkrumah, 1968: ix). Rich states are citizens of the international community whereas poor states are subjects. For example, the Global North was able to rig the system to its advantage through instituting the ‘Grand Bargain’ in 1994 (Roberts and Parks, 2007: 52). The Global South accepted the Agreement on Trade-Related Investment Measures (TRIMs) in 1994, crystallising their position within the international division of labour, and stifling their emergent upward mobility (Roberts and Parks, 2007: 52). Some may object that although the structure of the global economy is unfair, it is not racist, as this would further require inequality to be justified in racial terms. However, this essay holds that sensitivity to history exposes the racialised colonial foundations of the contemporary international division of labour (Jones, 2008: 924). The racialised discourses propagated by colonialism sustain the assumption that the Global South is somehow naturally destined to be a mere passive exporter of raw materials. This discourse has permeated the International Monetary Fund (IMF), manifesting in its recommendations that Ghana concentrate on the production of gold and cocoa beans as in colonial times (Kampfner, 2001). Some may object to this focus on the external causes of underdevelopment (Rawls, 1999: 108), arguing that poverty is primarily the product of poor internal choices such as Mozambique’s accumulation of vast debts (Plank, 1993: 428), or Nigeria’s corruption (Albin-Lackey, 2007). While an important point, colonialism is actually the root cause of these supposed ‘internal’ problems. Corruption and poor governance partly spring from colonial policies which undermined traditional belief systems and forms of social organisation necessary for good governance (Trebilcock and Prado, 2011: 254). Colonial ‘divide and rule’ spawned civil wars which continue to undermine development: the civil war in Burundi (1993-2005), for example, grew out of Belgium’s strategy of recruiting the Tutsi to govern the Hutus (Marshall, 2016: 128). While these underlying maladies go uncompensated, aid will continue to merely treat the symptom, not the problem. International financial institutions reflect the normative fabric of the international community (Boniface, 2002: 366), and therefore embody its racism. This is evident in the ‘structural adjustment’ programmes peddled by the World Bank and IMF during the 1980s, demanding loan recipients to liberalise and privatise their economies in accordance with strict budget discipline (Abouharb and Cingranelli, 2007: 3). The results were disastrous, failing to promote economic growth, and forcing developing nations to implement economic policies favourable to the hegemon underwriting the financial institutions (Plank, 1993: 417). Such neoliberal logic has since re-emerged through the new ‘Good Governance’ norm, which assumes underdevelopment to be the product of domestic political and economic environments, and so seeks to educate these states to create the preconditions for development (Gallagher, 2014: 333). Plank (1993: 428) makes a persuasive case that IMF policy is not racist, but driven by a misguided faith in economic orthodoxy. The Bretton Woods institutions were established to facilitate European post-war recovery, therefore infantilising the colonisers as much as the colonised (Schifferes, 2008). While initially persuasive, this challenge fails to appreciate the changes the global economy has experienced since the end of the Bretton Woods system which has made ‘late development’ far less obtainable (Roberts and Parks, 2007: 48) – the initial post-war manifestation of the World Bank and IMF cannot be paralleled with their contemporary manifestations. The ‘neutral’ economic language of international financial institutions harbours unacknowledged racist ideas. The ‘Good Governance’ norm promotes a paternalistic narrative reminiscent of the ‘white man’s burden’ of the colonial era (Henderson, 2013: 72), constructing a child-like Global South that needs to be educated by the firm parental hand of the West. Racism constructs an Us/Other dialectic which distances the Western donor from the non-white recipient, making the horrifying human costs of economic fundamentalism less disturbing. In practice, the policy of ‘full cost recovery’ in Ghana means forcing people to pay for the essentials of life including water – a resource widely assumed to be a right, and publicly subsidised in the developed world (Kampfner, 2001). International racism means the subaltern experience is woefully ignored. Racism makes this destitution appear natural rather than the product of international choices, legitimising the human costs of neoliberal reforms primarily designed to advance the economic interests of the dominant powers in the system. Racism is unavoidably bound up with the production of knowledge, and constructs the legitimate/illegitimate dichotomy dominating discussion of nuclear weapons. Some scholars hold that irresponsible non-Western states with nuclear weapons represent an objective threat to international order (Sagan, 1994: 68). They claim that this is not an irrational racist fear, but a recognition of the facts. However, it is the position of this essay that these ‘facts’ are socially constructed, based on a false ‘Orientalist’ (Said, 2003: 4) characterisation of the Self as rational and responsible, and the Other as irrational and irresponsible. This Orientalism is exemplified in the way North Korea is continually othered in Western media. False accounts of Kim Jong Un having his uncle fed to dogs were unquestioningly reproduced by outlets such as Fox News (DeMarche, 2015), creating a caricature of Oriental despotism. Such Orientalist narratives create fear that deterrence will not work on ‘barbaric’ non-Western regimes, when in reality the logic of nuclear weapons will compel non-Western leaders to act much like their Western counterparts, as all fundamentally wish to survive (Waltz, 2012: 4). This erroneous presentation is useful to the West, as it conditions acceptance of the existing ‘nuclear apartheid’ (Gusterson, 1999: 113) which is conducive to Western interests. Orientalism means that a single North Korean nuclear weapon is presented as an existential threat to the international community, whereas hundreds of US nuclear weapons are not (Wendt, 1992: 397). As Cox (1981: 128) rightfully asserts, ‘theory is always for someone, and for some purpose’ – racism constructs reality to the benefit of the West. The West defines its interests as synonymous with those of the international community, silencing legitimate concerns of non-Western states. For example, Kim Jong Un’s logical reasons for seeking nuclear weapons are silenced by Western media, with MSNBC propagating the false psychological narrative that he is simply a ‘madman’ (Al Jazeera, 2017). Such erroneous analysis filters into the subconscious of Western leaders, heightening distrust, undermining faith in negotiated solutions, and increasing the risk of fatal miscalculations (Al Jazeera, 2017). Historical narratives of oriental barbarism intersect with contemporary concerns surrounding nuclear weapons, thereby determining *America’s overreaction* to allegations that Iraq had developed weapons of mass destruction (WMDs) (McQeeney, 2014: 299). Western populations willingly swallowed this justification for the use of force, suggesting that contrary to the contention of democratic peace thesis (Kant, 2017: 7), democracy is not always a constraint on belligerence as irrational, racist logic subverts people’s perceptions of their real interests. Racism produces irrational international actors, driving dangerous behaviour in the international system.

### Offense

#### We affirm the resolution - Resolved: The United States should substantially reduce its military support of Taiwan.

#### Military support for Taiwan prevents peaceful reunification – it uses racist rhetoric about democratic promotion to uphold Taiwanese authoritarianism and global imperialism

Qiao 24 - Qiao Collective is a grassroots media collective of diaspora Chinese writers, Monthly Review, July 1st 2024 “Taiwan: An Anti-Imperialist Perspective” [https://monthlyreview.org/2024/07/01/taiwan-an-anti-imperialist-perspective/] Accessed 11/1/24 SAO

In the Western imagination, Taiwan exists as little more than a staging ground for ideological war with the People’s Republic of China (PRC)—a crossroads of democracy versus authoritarianism, Western values versus Chinese backwardness, and free market capitalism versus closed-door communism. Yet for centuries, the island of Taiwan has played a rich and pivotal role in broader Chinese history. Located just one hundred miles from the mainland’s southeastern coast, Taiwan was linked to the mainland through migration, trade, language, and culture long before European and Japanese colonizers seized on its strategic location as a launchpad for economic and military forays against China at large. Today, this history continues as U.S. imperialism positions Taiwan as an ideological and military base for its new Cold War against China.1 Taiwan’s separation from the Chinese mainland began in 1895, when the Qing government was forced to cede Taiwan to Japan after its defeat in the First Sino-Japanese War. While Japan’s surrender at the end of the Second World War legally restored Chinese sovereignty over Taiwan, the Chinese Civil War and the global Cold War once again rendered Taiwan an instrument for imperial ambitions against China. For the ascendant postwar United States, the 1949 establishment of the PRC under the Communist Party of China (CPC) marked the “loss of China”—a blow only partially recouped by propping up the fleeing Chiang Kai-shek government in Taiwan as “Free China.” In 1950, as the United States waged war to prevent the socialist unification of Korea, President Harry S. Truman dispatched the U.S. Navy’s Seventh Fleet to the Taiwan Strait to similarly foreclose the possibility of a unified socialist China. The legacy of that militarized division remains today, as the United States enforces the separation of Taiwan from the PRC through multibillion-dollar arms sales, menacing war games, and a concerted propaganda drive, which together undermine the possibility of peaceful reunification. This bipartisan campaign of hybrid warfare has intensified over the last fifteen years following China’s rise as a major power, the corresponding U.S. “Pivot to Asia,” and the era of “decoupling” pursued by both the Donald Trump and Joe Biden administrations. As the U.S. military declares the Pacific its primary theater of war, successive U.S. administrations have marshaled enormous economic, military, and ideological resources to build up Taiwan as a focal point for this new Cold War. This program violates the letter of the One China principle and the spirit of the United States’ own “One China policy,” which together have formed the basis for bilateral relations since 1979. Furthermore, they neglect the centuries-long shared history of Taiwan and its people with their neighbors across the strait. Just as Western colonialism was once justified as a “civilizing mission,” U.S. imperial designs on China at large march under the banner of promoting “democracy” and defending the “international rules-based order.” The U.S. claim to be acting in defense of Taiwan’s “vibrant democracy” from Chinese authoritarianism is particularly ahistorical, given that it is responsible for propping up the Kuomintang (KMT) military dictatorship under Chiang and his successors for almost forty years. Meanwhile, despite grandiose language about U.S. global leadership, the reality is that the majority of the world understands cross-strait relations to be an internal matter for China. Only eleven United Nations member states maintain formal diplomatic relations with Taiwan (as the Republic of China [ROC]), and no country recognizes Taiwan as an independent nation. This fact is unsurprising; UN recognition of the PRC as the legitimate representative of China came on the wings of overwhelming support from the Third World. Having experienced the genocidal violence and economic exploitation inherent to the Western imperial system, the Global South, like China itself, adheres to the tenets of sovereignty and non-interference. Though ideologically diverse, proponents of Taiwanese independence rely on an overlapping revisionist toolkit that elides the historical context of the unresolved civil war shaping the cross-strait relationship. Instead, China’s aspirations for national unity are cast in terms of imperialism and expansionism. The era of KMT martial law is erroneously invoked as precedent for authoritarian Chinese encroachment, obscuring the historical KMT-CPC rivalry and the role of the United States in supporting the military dictatorship. Meanwhile, the history of Japanese colonialism has been systematically revised as “benign” rule to form the bedrock for a non-Chinese local identity. Claims that Taiwan’s democracy has “voted out” reunification as a political pathway omit the crucial context that the island’s most vocal left-wing supporters of unification were systematically purged, jailed, and murdered under Japanese colonialism and KMT rule. Efforts to co-opt Taiwan’s yuánzhùmín, or Indigenous peoples, into the project of Taiwan independence rely on a similar level of obfuscation; despite the separatist camp’s appropriation of decolonial rhetoric, yuánzhùmín have historically been apathetic toward the pro-independence Democratic Progressive Party (DPP).2 In spite of these attempts to stake Taiwan separatism to a schema of ethnic difference, official demographics list 95 percent of Taiwan’s population as being Han Chinese, the majority ethnic group of the Chinese mainland. While those on the left may be (rightfully) skeptical of the elite rhetoric of freedom and democracy, this rhetoric of Chinese imperialism, settler colonialism, and ethnic chauvinism may be harder to parse for those unfamiliar with Taiwan’s history. Yet, whether it is couched in the moralizing language of classic Cold Warriors or self-styled leftists, Taiwanese independence ultimately serves the material interests of Western imperialism. Like the European and Japanese imperialists who colonized Taiwan for access to Chinese trade from the seventeenth through twentieth centuries, the United States transparently envisions the island as an outpost for efforts to contain China militarily while decoupling from it economically. More than seventy years since U.S. military leader Douglas MacArthur described Taiwan as an “unsinkable aircraft carrier” in the nation’s Cold War against China, Taiwan remains a crude asset for U.S. military realpolitik. It is the linchpin of the so-called first island chain that links the four hundred U.S. military bases spread across Asia and the Pacific and, crucially, home to the Taiwan Semiconductor Manufacturing Company, the world’s largest advanced semiconductor chip manufacturer. Lofty narratives of Taiwanese independence thus ultimately fuel consent for militarization, intervention, and war while marginalizing anti-imperialist voices for diplomacy and peace. They also disguise the true intent of retaining Taiwan as a neocolonial outpost of Western empire in order to undermine China’s sovereign economic development. There is no “independence” in becoming a U.S. client regime entrapped in a capitalist world order. It would set a precedent for any country, large or small, that challenges U.S. hegemony to be balkanized with impunity. For the left to support such an outcome would be self-sabotage on an epic scale, regardless of the titanic politico-economic shifts on both sides of the strait since the Chinese Revolution of 1949.

#### Reject American propaganda: The U.S will to dictate outcomes in Asia is an insidious attempt to plunder the worlds resources. Transition wars only happen if you vote neg.

Enfu & Baolin 21 - Cheng Enfu and Lu Baolin, Monthly Review, May 1st, 2021 “Five Characteristics of Neoimperialism” [https://monthlyreview.org/2021/05/01/five-characteristics-of-neoimperialism/] Accessed 1/7/23 SAO

Economic Hegemony and Fraud Imperialism as represented by the United States employs hegemony, bullying, and unilateralism, and adheres to double standards in diplomatic policy. At one point, Pompeo publicly admitted and expressed pride in his country’s fraudulent actions. “I was the CIA director,” he said. “We lied, we cheated, we stole. It was like we had entire training courses…it reminds you of the glory of the American experiment.”62 In the post-Cold War era, the United States dominates the world, free from any powerful checks and balances. It relies on its major advantages of military force, U.S. dollar hegemony, external propaganda, and science and technology to carry out bullying all over the world and to commit fraud both at home and abroad.63 In March 2018, the United States issued a document entitled Findings of the Investigation into China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 of the Trade Act of 1974, which accuses China of “enforcing or compelling US enterprises to transfer technology” and “illegally invading US commercial computer networks to steal intellectual property rights and sensitive business information.” The purpose of this document was to create a pretext for launching a trade war; its accusations are nothing but rumors and do not correspond to the facts. What is the source of China’s technological progress? It flows from the efforts of gifted entrepreneurs who benefit from huge government investments in basic science. As former U.S. secretary of the treasury Lawrence Summers said, “it’s coming from an educational system that’s privileging excellence, concentrating on science and technology. That’s where their leadership is coming from, not from taking a stake in some U.S. company.”64 In provoking its economic and trade conflict with China, the United States has had an obvious intention: to blackmail and suppress China on an overall basis, starting with the trade war and gradually expanding into the areas of science and technology, finance, food, resources, and so on. U.S. authorities seek to weaken China’s strengths in trade, finance, industry, and technology, trying to ensure that China will not pose a challenge to the global hegemonic position of the United States. With its slogan of “America First,” the Trump administration promoted U.S. hegemony and imposed economic sanctions on other economies. Its economic and trade policies were aimed principally at China, but were also directed at traditional allies such as the European Union, Japan, India, and South Korea. Time after time, Washington has practiced economic extortion and containment. It will never be forgotten that as early as the mid–1980s the United States forced Japan to sign the Plaza Accord and induced it to implement a low-interest monetary policy that brought large quantities of foreign capital into Japan. The result was that a surge of short-term demand for Japanese yen caused the country’s currency to appreciate sharply against the U.S. dollar. The influx of foreign capital and the monetary policy of low interest rates brought a soaring increase in Japanese asset prices. Despite the short-term prosperity, the eventual result involved big losses for Japan. The high asset prices meant that the foreign capital was soon cashed out and withdrawn, while the Japanese economy suffered huge setbacks and endured a “lost twenty years.” Political Hegemony and Fraud The United States has always labeled itself a representative of countries advocating democracy, freedom, and equality. Using political and diplomatic means, it spares no effort to impose its political system on other countries, especially the developing states it identifies as “dictatorships.” Former U.S. president George W. Bush identified Iran, Iraq, and North Korea as an “axis of evil.” The United States exerts pressure on the rulers of such countries, applying double standards on questions of human rights. Using its propaganda, it demonizes these states as “undemocratic” and “autocratic,” while subsidizing nongovernmental organizations and media, as well as inciting dissidents and the opposition to mount “color revolutions” aimed at overthrowing the legitimate governments. Acting at the behest of its military circles and monopoly energy groups, the United States has been a consistently destructive force in the Middle East and Latin America. Syria was listed by Washington among six “evil” countries, and the United States branded the Syrian government led by Bashar al-Assad as illegal. U.S. senator John McCain, however, revealed the real purpose behind these moves. “The end of the Assad regime,” McCain stated, “would sever Hezbollah’s lifeline to Iran, eliminate a long-standing threat to Israel, bolster Lebanon’s sovereignty and independence, and inflict a strategic defeat on the Iranian regime. It would be a geopolitical success of the first order.”65 In Latin America, the United States has continued its blockade against Cuba despite twenty resolutions carried overwhelmingly in the UN General Assembly. Meanwhile, the United States is conducting an economic blockade against Venezuela, resulting in the country’s economic deterioration in recent years. Former U.S. vice president Mike Pence, setting aside Venezuela’s elections and popular support for the government, with no consideration of truth—even leaving out the U.S. economic siege war on Venezuela in violation of international law—pronounced: “The Maduro government’s vicious gangs have crippled the economy.… The true cost of the crimes of the Maduro regime cannot be assessed in numbers.… Two million people have fled the result of dictatorship and political repression that’s resulted in deprivation and created conditions near starvation. The United States will continue to help the Venezuelan people restore their freedom. The people will be free.”66 The United States is now applying to China the kind of Cold War policies that used to be employed against the Soviet Union. State department director of policy planning Kiron Skinner describes the fractious relations of the United States with China as “a fight with a really different civilization and a different ideology.”67 The U.S. ruling class knows very well that the socialist system is superior to the capitalist system. Once large socialist countries such as the former Soviet Union and China become rich and strong through peaceful competition, it is inevitable that they are faced with confronting the hegemonic aims of the United States, which seeks nothing less than a unipolar world. Any attempts to promote broad reforms in the outdated imperial economic and political order are seen as a threat to U.S. hegemony. Consequently, the United States has adopted the dual strategy of “contact and containment,” engagement and aggression, which it seeks to pass off as “peaceful evolution.” In reality, the so-called democratic politics in the United States are nothing but an illusion. First, the electoral process in the United States has increasingly amounted to a political fight between the two parties of the monopoly bourgeoisie. As the candidates of different factions of the monopoly bourgeoisie have campaigned for election, they have resorted to rumors, personal attacks, and slanders against their opponents, sidelining the real issue. Second, so-called democratic politics in the United States involve no more than a pro forma and procedural democracy. The pro forma voting system has been reduced to monetary politics, family politics, and oligarchic politics—that is, to an essentially undemocratic “despotism of monopoly capital,” or democracy for the few. Cultural Hegemony and Fraud Former U.S. National Security Advisor Brzezinski believes that “strengthening American culture as the ‘model’ of the world’s cultures is a strategy that must be implemented by the United States to maintain hegemony.”68 U.S. cultural hegemony is manifested principally through its control of media outlets and education, and through the propaganda function, both at home and abroad, of its literature and art, its liberal arts academia, and its values. The United States exports films, music, and literature all over the world. It controls almost 75 percent of the world’s television programs, and owns powerful film and television companies such as WarnerMedia, Universal Pictures, Paramount Pictures, and Columbia Pictures, which every year produce dozens of high-budget films involving investments of hundreds of millions of dollars. Research and reporting carried out by the U.S. mainstream media effectively dominate the shaping of world public opinion. The United States also controls the authoritative journals that mold discourse in the area of liberal arts academia, and it is the United States that determines the standards of elite education. The 2020 QS World University Rankings provide an example. The top places in these rankings are all taken by U.S. universities, and this situation provides a powerful tool for spreading deceptive Western “universal values,” Western constitutional views, and neoliberal economic concepts throughout the world. The basic views of the U.S. liberal arts establishment have taken a firm hold on the elites and masses at home and abroad.69 For example, the United States extols vulgar examples of literary and artistic kitsch as distinguished works of culture, deserving of Oscars or Nobel Prizes. Neoclassical economics (and its counterpart in the form of neoliberalism) is responsible for a string of economic crises and for increased polarization between rich and poor. Nevertheless, it is depicted as a scientific theory that promotes development, increases popular welfare, and is worthy of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. In the United States, works that do not conform to the literary, artistic, and liberal arts canons of monopoly capital are difficult to disseminate via authoritative media, while writers and artists of real distinction are excluded, suppressed, or defrauded. The United States also holds an absolutely dominant position in the global field of cyberspace. Of the thirteen root Domain Name System servers, nine are under the direct control of U.S. corporations, universities, or government departments, while another is directly controlled by a U.S. nonprofit organization.70 Using these root Domain Name System servers, the United States can easily steal global intelligence, carry out network monitoring, and launch cyberattacks. The surveillance program PRISM, revealed by Edward Snowden, shows that the United States has complete control over the hardware and software of networks globally, and is well able to monitor the entire world and strike any other country. Lastly, the United States controls the intelligence alliance known as the Five Eyes (the United States, United Kingdom, Canada, Australia, and New Zealand), through which it conducts large-scale monitoring activities and exercises cyber hegemony domestically and internationally.71 The cultural hegemony of the United States, its control over liberal arts academia, and the fraudulent use to which these advantages are put also appear in the stances taken by the United States on questions of ideology and values. These stances are always hostile to socialism and communism, and restrict the development of socialist countries. Previously, the United States devoted most of its efforts to smearing the Soviet Union, but the main target is now China. Early in May 1990, Nixon stated frankly: “While rebuilding the relationship with China, it is very important that we continue to pressure them to abandon socialism. Because we will use this relationship to make China’s policies milder. We must stick to this key point.”72 According to survey data from the U.S. Pew Research Center—an organization surely influenced by U.S. cultural hegemony and fraud—74 percent of Chinese college or university graduates love U.S. culture.73 It is a fact that most Chinese liberal arts scholars who have studied in the United States favor its basic institutional academic theories. To varying extents, they worship, flatter, and fear the United States. This seriously affects the confidence of Chinese citizens in Marxist culture, in socialist culture, and in China’s own rich traditional culture, and needs to be eliminated as soon as possible. Military Hegemony and Fraud Since the disintegration of the Soviet Union, the United States has become increasingly presumptuous and has tended to resort to military force or threats in dealing with questions of international relations. In 1999, U.S.-led NATO forces bombed the Federal Republic of Yugoslavia, invoking the formula of “human rights above sovereignty.” In 2003, despite strong opposition from other countries, the United States invaded the sovereign state of Iraq. The Iraq War was not authorized by the UN Security Council, and Washington did not have any legal basis for its military intervention. The United States falsely claimed that Iraq possessed chemical weapons of mass destruction. After occupying Iraq, however, the United States found no evidence to prove that Iraq could produce chemical weapons of mass destruction. The real purpose of the United States in fabricating this lie was to control Iraq’s oil resources by military means. The United States has consistently emphasized that its own interests should take first place and that its military advantages are not to be challenged. Although its economic strength has declined in relative terms, the United States is still expanding its arsenal and substantially increasing its defense spending. Since the Cold War, the United States has continued to create various military threats and pressures in Europe, the Middle East, and the Asia-Pacific region. To consolidate its hegemonic status, the United States has advocated and promoted NATO’s eastward expansion, with the goal of including all the Central and Eastern European countries in NATO’s sphere of influence and thus constricting Russia’s strategic space. In the Middle East, the United States aims to subvert the legitimate regimes of countries such as Syria and Iran by military means, and to support “color revolutions” in the region. In Asia in recent times, Washington has heightened tensions on the Korean peninsula and has also implemented its “Indo-Pacific strategy” aimed at containing China. The U.S. “Indian strategy” is serving to reveal the identity of its military allies and partners. Allies of the United States include Japan, South Korea, Australia, the Philippines, and Thailand, and its claimed “partners” include Singapore, Taiwan (China), New Zealand, Mongolia; a number of South Asian countries such as India, Sri Lanka, the Maldives, and Nepal; and various Southeast Asian countries such as Vietnam, Indonesia, and Malaysia. The United States further proposes to strengthen its cooperation with Brunei, Laos, and Cambodia. In addition, it will work together with traditional allies such as Britain, France, and Canada to protect so-called Indo-Pacific freedom and openness.74 With the increase in China’s national strength, various U.S. scholars have been eager to invoke the Thucydides trap, claiming that it is difficult for Sino-U.S. relations to escape from this logic. But the truth, as China’s president Xi Jinping has pointed out, is that there is currently no Thucydides trap. Such a trap might, however, be created if the United States and its allies repeatedly make strategic miscalculations involving great powers.75 It may be asserted that it is the military hegemony and fraud of the United States that provides the root cause of the widespread instability, constant local wars, rise of war threats, and refugee crises around the world. Neoimperialism Is a Parasitic and Decaying Late Imperialism As Lenin stated, Imperialism is an immense accumulation of money capital in a few countries.… Hence the extraordinary growth of a class, or rather, of a stratum of rentiers, i.e., people who live by “clipping coupons,” who take no part in any enterprise whatever, whose profession is idleness. The export of capital, one of the most essential economic bases of imperialism, still more completely isolates the rentiers from production and sets the seal of parasitism on the whole country that lives by exploiting the labour of several overseas countries and colonies.76 In the era of neoimperialism, the number of rentiers is increasing sharply, and the nature of the rentier countries is becoming more pronounced. The parasitism and decay of a small number of capitalist countries is further worsened, as can be seen specifically in the following aspects. First, the United States employs its military, intellectual property, political, and cultural hegemony, as well as the U.S. dollar, to plunder the wealth of the world, especially that of developing countries. The United States is the world’s largest parasitic and decaying country. As evidence of this, we may take the trade between China and the United States. China sells to the United States goods produced by cheap labor, land, and environmental resources. The United States does not need to produce anything in order to buy these goods; it can simply print banknotes. With the money earned, China can then buy only virtual assets such as U.S. treasury bonds, and provide finance for U.S. consumer lending and outward expansion. The United States exports to China securities to which value cannot be added, while China exports to the United States mainly physical goods and labor services. The National Health Report released by the National Health Research Group of the Chinese Academy of Sciences shows that the United States is the country with the most hegemonic dividends in the world, due to the position of its currency, while China is the country with the largest loss of hegemonic dividends. For the year 2011, U.S. hegemonic dividends totaled $7396.09 billion, corresponding to 52.38 percent of the country’s GDP, and the average hegemonic dividends obtained per day came to $20.263 billion. Meanwhile, the sum lost by China totaled $3663.4 billion. In terms of labor time, about 60 percent of the working hours of the Chinese workforce were effectively given without recompense to serve international monopoly capital.77 Second, military spending has increased, which in turn increases the burden on working-class people. Neoimperialism leads and promotes military-related scientific and technological research, the development of advanced weapons, and the expansion of military production. As the People’s Daily observed in 2016, “the military-industrial complex supported by monopoly capital and the cultural hegemony formed on the basis of colonialism have prompted the western countries to intervene in other countries’ affairs at their will**.”**78 Neoimperialism has thus become the initiator of regional turmoil and instability, and the engine of war. Over the past thirty years, the United States has spent $14.2 trillion on waging thirteen wars.79 Meanwhile, lack of money hinders improvements to the living conditions of the U.S. people in areas such as medical insurance. Exorbitant military spending has become a heavy burden on the country and its people, while the parasitic monopolies in the arms industry have reaped immense profits. According to statistics of the British Institute for International Strategic Studies, official U.S. military expenditures in 2018 came to $643 billion, and in 2019 will reach $750 billion, more than the sum of the military spending of the world’s eight next largest military powers. Since the end of the first Cold War, the United States has launched or participated in six major conflicts: The Gulf War (1991), Kosovo War (1999), Afghanistan War (2001), Iraq War (2003), Libya War (2011), and Syria War (2011).80 The addiction of monopoly capitalism to war is a manifestation of its parasitic and decaying nature. This barbaric characteristic of the system runs counter to civilization and threatens the shared future of the human community. It proves that neoimperialism is the primary root of war. Third, wealth and incomes are concentrated in the hands of a specific class of owners of financial assets, as reflected in the 1 percent versus the 99 percent formulation. At the neoimperialist stage, the socialization, informatization, and internationalization of production have reached unprecedented levels, and the ability of human beings to create wealth is many times greater than in the old imperialist period. Nevertheless, the advance of productivity that is supposed to be a common gain for humankind has mainly benefited the financial oligarchy. “The bulk of the profits go to the ‘geniuses’ of financial manipulation,” one observer notes.81 In 2001, for example, the financial wealth (excluding property rights) held by the wealthiest 1 percent of the U.S. population was four times greater than that of the poorest 80 percent. The 1 percent held assets on the stock market of $1.9 trillion, roughly equivalent to the value of the stock held by the other 99 percent.82 Fourth, monopoly hinders technological innovation, slowing its advance. The greed and parasitism of financial monopoly capital make its attitude to technological innovation ambivalent. Monopoly capital relies on technological innovation to maintain its monopoly status, but the high profits that result from this status mean that monopoly capital shows a certain inertia in promoting innovation. Even if many advanced functions of mobile phones are successfully developed in the same year, the monopoly producers of mobile phones will divide up these functions to be introduced and promoted over several years. The purpose is to ensure that consumers will continuously purchase mobile phones with new functions, allowing the corporations to obtain high monopoly profits every year. Fifth, the tendency for monopoly capital and its agents to cause decay in the mass movement is becoming more serious. Lenin observed that “in Great Britain the tendency of imperialism to split the workers, to strengthen opportunism among them and to cause temporary decay in the working-class movement, revealed itself much earlier than the end of the nineteenth and the beginning of the twentieth centuries.”83 Neoimperialism divides the working class, striking at and weakening the labor unions using the excuse provided by the collapse of the Soviet Union and the tremendous changes in Eastern Europe. It also uses its monopoly profits to buy the support of individuals, and fosters opportunist and neoliberal forces within the workers’ movement and various other mass movements. The results of such ploys include the downturn in size and activity of labor unions and other progressive movements, the low ebb of the world socialist movement, and a more obvious and serious tendency for workers to worship the forces of neoimperialism or to be intimidated by them.

#### Converging extinction catastrophes are driven by US imperialism

Handel 23 - Peter Handel, Truthout, December 30, 2023 “We Must Reckon With the Most Dangerous System of Extinction Humans Ever Created”[https://truthout.org/articles/we-must-reckon-with-the-most-dangerous-system-of-extinction-humans-ever-created/] Accessed 9/11/24 SAO

Capitalism is killing us. That’s the unequivocal message of a new book, Dying for Capitalism: How Big Money Fuels Extinction and What We Can Do About It by Charles Derber and Suren Moodliar. The authors draw critical links between capitalism, militarism and environmental destruction to show how nothing short of radical change is required to shift the deadly course humanity as a whole is now on. The book blends historical and contemporary analysis with a concluding interview from 2062 based on speculative fiction. Derber and Moodliar call for a “new abolitionism” that draws wisdom and inspiration from the movement to abolish slavery and for a deep understanding of how our most critical problems are intertwined. Derber, a professor of sociology at Boston College, has written 26 books — on politics, democracy, fascism, corporations, war, capitalism, climate change, the culture wars and social change. Some of his other recent books include Welcome to the Revolution, Moving Beyond Fear, and Capitalism: Should You Buy It? In this exclusive interview with Truthout, Derber discusses how the myth of American exceptionalism undermines the solutions to the existential threats we face today, why “green capitalism” is an oxymoron, and the need to confront a “triangle of extinction.” Peter Handel: In your new book, Dying for Capitalism, you write “a ‘triangle of extinction’ that connects capitalism, environmental death and war creates an emergency that humanity-as-a-whole has never faced before.” How are these things interlinked? Charles Derber: Americans are normalizing what is truly the greatest emergency ever faced by humanity — one threatening to doom all life species. In an earlier 2010 book, Greed to Green, I argued that President Obama should declare a national emergency to stop impending climate extinction and wake up Americans. Obama did not declare the emergency, and millions of Americans didn’t wake up. Dying for Capitalism shows the existential threat has grown faster than I had imagined. This is not simply because of the acceleration of climate tipping points but the escalating risk of nuclear war arising from an increasingly unstable and militarized international and American world order. Witness not just Ukraine after U.S.-driven NATO expansion to the Russian border but the bipartisan new Cold War with China and today’s erupting wars in the Middle East. Many U.S. wars have been fought to secure more oil. Protecting the U.S. right to create climate change is thus fueling “forever” wars. As people are dying for capitalism in the sense that they want ever more of it, they are also literally dying for the consequences of craving a literal death system. The “triangle of extinction” exposes what many on the left have suspected but never fully understood. U.S. capitalism fuels both climate change and militarism for five core reasons: 1) elevating profit over all other aims; 2) commitment to unfettered economic growth; 3) expanding to control markets and resources domestically and internationally; 4) producing commodities for sale on the market rather than public goods; and 5) concentrating political power among corporate elites, notably the military-industrial complex and the carbon-industrial complex. All of these forces lead capitalist elites and the market to ignore the existential risks and treat them as what economists call “externalities” — which include the ultimate costs externalized from producers and paid by the general public. How climate and military threats fuel each other is a major neglected subject. Ironically, the Pentagon itself annually reports that climate change is the biggest national security threat, with environmental disasters and sea rise driving people from endangered residences toward inhabitable land. Such migrations — along with intensifying floods, droughts and extreme temperatures — set up violent competition among people desperate for land and resources. Moreover, many U.S. wars have been fought to secure more oil. Protecting the U.S. right to create climate change is thus fueling “forever” wars. The Pentagon also does not tell us that it is the world’s biggest institutional creator of carbon emissions. While climate change drives war, militarism drives climate change. This is not just about the obvious environmental destruction wrought by war. The modern military is a monster carbon producer, with massive carbon burned every day in training and wartime military flights; in fueling huge naval carriers, submarines and tanks; in producing planes and munitions; and in running more than a thousand military bases. Most of us realize that the fossil fuel industry makes massive amounts of money while destroying the environment, but you show how the development of the fossil fuel industry is inextricable from the advent of modern capitalism. Tell us about this. While fossil fuels were central to capitalist development, it didn’t have to be that way. Early industrial capitalism could have developed without fossil fuels. Indeed, 19th century British factories initially used water-powered steam engines but shifted away toward coal and oil. Tank warfare and the new importance of planes in World War I was a major catalyst for the 20th century shift toward oil. World War II sealed the deal. This had less to do with technological efficiency than social and political factors. Owners were worried that water would be viewed as part of the commons and subject to public controls or appropriation, threatening profits. Coal and oil were less likely to be viewed as part of the commons, since they were not as historically central to public use and well-being as water. The long historical shift from coal toward oil was also driven by social and political interests rather than technological advantages. Coal miners were rebellious at an early stage, mobilized by communities formed working under adverse and dangerous conditions. Fear of unions helped shift industrial capitalism in the late 19th and 20th centuries toward oil. Oil became the central energy source of U.S. 20th century capitalism largely because of wars, especially World War I and World War II. Tank warfare and the new importance of planes in World War I was a major catalyst for the 20th century shift toward oil. World War II sealed the deal. Enormous amounts of oil were needed to power the planes and produce the arms to win this huge conflagration. And U.S. interests in both securing and selling oil in Asia were a major factor fueling U.S. interest in war in the Pacific. The Bulletin of Atomic Scientists has set the Doomsday Clock at 90 seconds to midnight, the closest it has ever been. Why has the risk of nuclear catastrophe become so heightened? The Bulletin issued a statement saying the change was “largely but not exclusively” due to Russia’s invasion of Ukraine. They also now connect nuclear doomsday with environmental doomsday, noting that climate change and other environmental-linked threats such as COVID-19 played a role in resetting the clock. They are pulling the curtain back to reveal some of the “triangle of extinction.” The Doomsday Clock is an important symbol, recognized around the world as a crucial indicator of potential imminent extinction. Founded in Chicago after the U.S. development of the nuclear bomb — a subject popularized in the film Oppenheimer — the Bulletin’s scientists, despite their major contributions, have their own limitations. They are not political economists or social theorists, and their U.S. roots have shaped their thinking. This may explain why they have not portrayed the full “triangle of extinction,” nor focused on the unique U.S. role in supercharging the race to extinction. This goes beyond their relative lack of attention to the historical role of the U.S. and NATO in leading up to the Ukraine war. They have not offered a strong critique of the extinction risks inherent in building U.S. hegemony throughout the nuclear era. Nor have they highlighted the U.S. role in catalyzing Middle Eastern wars for oil and now heating up the new Cold War with both Russia and China, as well as playing a role in the current Israel-Hamas-Iran-U.S. military crisis, all intensifying extinction perils. The building of a world economy around U.S.-dominated oil and arms is the heart of today’s “extinction triangle.” [But] instead of seeing extinction, many in the U.S. see a chosen people’s defense of liberty. Nor does the Bulletin highlight how capitalist economies, and especially U.S. militarized capitalism, are crucial structural extinction forces. We hope that the Bulletin’s scientists will read Dying for Capitalism. If the nuclear scientists were to discuss the need to transform U.S. militarized capitalism, it would expose more of the “triangle of extinction,” and help mobilize both scientists and the public. While you are focused mostly on the disastrous impact of capitalism, you also take on elements of American culture in Dying for Capitalism. In particular, you discuss the myth of American exceptionalism. How did this idea come to be so ingrained in American culture and how does it undermine solutions to the dire problems we face today? American exceptionalism — the idea that the U.S. is the only nation equipped to manage world affairs and preserve freedom and democracy — goes back to the foundation of the nation. The Puritans defined their settlement in America as a blessed “city on the hill.” George Washington stated that the U.S. was destined to become a great empire. The Monroe Doctrine confirmed that empire would begin in the Americas itself. Soon thereafter, the U.S. embraced the doctrine of Manifest Destiny, perhaps the most seductive military and moral doctrine of American exceptionalism, legitimating military expansion into the Pacific, including the murderous colonization of the Philippines. Teddy Roosevelt’s idealization of himself as a “rough rider” was part of the new 20th century U.S. drive to global empire; Roosevelt’s idealization of war, tied to his close relation to robber baron capitalists, such as the Morgan and Rockefeller financial and oil interests, helped fuel the long drive to a U.S.-led global fossil fuel, militarized capitalism. Empires need what I have called “immoral morality,” the use of lofty moral ideals to legitimate evil behavior. U.S. exceptionalism cloaked the rise of U.S. fossil fuel-based, militarist global empire as a crusade for democracy. The building of a world economy around U.S.-dominated oil and arms is the heart of today’s “extinction triangle,” shrouded in immoral morality. Instead of seeing extinction, many in the U.S. see a chosen people’s defense of liberty. You write that “green capitalism is an oxymoron.” Why? Americans have long been taught that technology is the solution to everything. Green capitalism exploits this seductive approach, which tells Americans not to worry: our technological prowess will solve climate change. Instead of helping Americans see capitalism as a leading cause of climate change, it flips the equation and says that capitalism is the solution, since only capitalism can create the technological innovations — whether electric cars, carbon capture, geo-engineering or cheap wind and solar energy — that will save the planet. Without changes in capitalist appetites for insatiable profit, growth, consumerism, expansion and war, the system will continue to place an infinite burden on a finite planet. Technology is obviously important in dealing with climate change. But even if capitalism delivers many green technologies, it will not prevent climate disaster. Our book explains why “green capitalism” is a dangerous illusion. Without changes in capitalist appetites for insatiable profit, growth, consumerism, expansion and war, the system will continue to place an infinite burden on a finite planet. This awareness is beginning to surface. People note that electric cars require scarce lithium that can generate militarized competition; moreover, building all the other parts of the car and the roads they depend on will continue to deplete the planet. It makes far more sense to build walkable cities than a new interstate highway system connecting suburbs with big lawns. The oxymoron derives from the reality that capitalism is designed for accumulating wealth and living big on a small planet, the perfect recipe for environmental death. You call for a “new abolitionism” that draws inspiration and wisdom from the first abolitionist movement. Talk about this. Our book ends with a conversation between a reporter and a climate and peace activist in 2060, describing how activists discovered in the 2020s the “slender path” to survival of life. They faced enormous skepticism about transforming large systems such as capitalism. But they found a path forward partly by looking backward. The 2020 activists were aware that pre-Civil War abolitionists were told they could never end slavery; it was an eternal system in human history and the U.S. We show that 2020s activists took from the abolitionists the refusal to lose hope and unexpected ways to challenge large systems regarded as unchangeable. There is no simple abolitionist formula; in fact, part of the slender path was rejecting the idea of a single orthodoxy. The abolitionists grew from a tiny group because they found ways of building links and solidarity with so many different movements and change agents. Radical socialists like William Lloyd Garrison welcomed moderate abolitionists such as Harriet Beecher Stowe, the author of Uncle Tom’s Cabin. Formerly enslaved people such as Frederick Douglass found common cause with white suffragettes. Reformers became part of the same larger struggle as militants like John Brown. Abolitionists often melded a mix of economic, political and cultural strategies into their own individual work. Douglass is a good example. He worked closely with Lincoln and foreign global leaders on the politics of emancipation, globalizing the struggle. At the same time, he helped lead the U.S. underground railroad and was an economic activist against the capitalist profitability of the slave trade. Douglass became the most widely photographed American of the 19th century, recognizing the role of culture in ending the slave system. We show how abolitionists of fossil fuels, war and yes, capitalism itself, find themselves in similar quandaries, and often despair, as did their abolitionist ancestors. But we highlight how a new abolitionism is already finding earlier abolitionist lessons for universalizing resistance — and protecting the commons and a new economy of public goods from what is surely the most dangerous system of extinction that humans have ever created.

## Nuclear Power Tech K Neg

### Thesis

#### Quantum physics proves dualism is false. Observation modifies reality, creating a feedback loop where consciousness and material conditions are inseparably entangled. Entanglement resolves determinism because If consciousness is an active participant in shaping reality, then moral decision-making cannot be fully pre-determined. That’s the only way to generate a proactive resolutional obligation. Vote neg on presumption since statements have infinite ways they can be false but only one where their true.

Maldonado 18 - Carlos Eduardo Maldonado, Full Professor, School of Medicine, Universidad El Bosque, Bogotá – Colombia, 2018 “Quantum physics and consciousness: a (strong) defense of panpsychism” [http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0101-31732018000500101] Accessed 4/23/21 SAO

Observation both creates and modifies reality. This is the famous problem of measurement in quantum physics. Such a problem was mathematically formalized as quantum mechanics. The trouble, though, is that along history, numerous interpretations of that mathematical formalism have arisen. Indeed, quantum mechanics allows for over fifteen different interpretations – many of them totally incongruent with the others (see, for instance, the Wikipedia entry on “interpretations of quantum theory”). The many interpretations of quantum mechanism are to be seen a sign of the importance and vitality of the core questions implicated therein. Due to reasons of space, I shall omit discussion of the panorama of the different interpretations. Not all concern themselves with the role of consciousness or conscious observation in quantum phenomena; however, they all are intrinsically pervaded by the role of consciousness and life vis-à-vis the economy of the universe, so to speak. The crux of the matter is conscious observation. Transcendence or transcendentalism is likely the wrong way to explain quantum quandaries, even though, as religion, it has been the dominant worldview in the history of the western world. Quantum physics hints at the opposite approach to the issue, namely immanence, i.e. the universe itself is mindful. We just do not encounter reality “out there”. This is exactly what makes of consciousness an epiphenomenon in the context of Physics. Instead, we have an experience of reality that is open-ended, unceasingly – that is exactly the story of evolution. We do experience reality in a manifold of ways, but all of those ways are still modes of experience. There is only experience, but experience may finally be the subjective side of what we have otherwise named quantum entanglement. Living beings really do not go out of themselves in order to experience nature and reality. On the contrary, they are constantly experiencing an universe in the process of becoming. The complexity of life and the world consists exactly in the fact that there are only open systems – namely open to matter, energy and information. Nature at large is not a realm external and different from living beings – that is, consciousness or life. Quite on the contrary, nature and the universe may be the ways in which living beings experience themselves, their history, their environment and habitat. The universe and reality are immanent unfolding realities to life and consciousness. Surprisingly, immanence has been a minor perspective in the history of science, philosophy and culture; it can be stated also as an alternative worldview. Table 2 presents some of the most important authors that have defended immanence. Table 2 presents the landmarks of immanence in the history of philosophy or science. However, some other names could be included. Notwithstanding, there is barely any mention in the literature about the relationship between quantum physics and immanence in the three authors considered in Table 2. It should be clear that the authors included in Table 2 never deal with quantum theory, either because of historical reasons or also because they are not concerned with the theory. It is my contention that immanence does take place in the corpus of quantum science via or thanks to or based on entanglement. An entangled state is an intertwining that is more than the parts entangled. Succinctly, it can be safely said that, at the end of the day, quantum physics consists of three intrinsically related layers: quantum mechanics, quantum waves, and entanglement. Entanglement can be understood as the strongest argument against mechanism and determinism, for it supersedes individuality. In the literature there is nearly no reference to the relationship between quantum physics and immanence, except for Thiele (2016), who is not rigorous in his understanding. Some floppy assessments are introduced here and there without any further justification. Indeed, the rationale for transcendence is the assumption of overcoming individuality. A singular entity exists to some extent on its own, but is entirely incomplete; so it seeks to transcend itself – to realize itself in a different stance. In other words, transcendence is a fulfillment of individuality onto a realm that is extrinsic to the existence of the entity considered. Bell’s inequality has shown that quantum entanglement does take place over large distances (ASPECT et al., 1982; YIN et al., 2017), and for more than between two entities. Quantum entanglement has been experimentally proven among three or four entities, originally by Fuchs (2003). Entanglement is an immanent relationship, i.e. an intrinsic, deeply interwoven interplay. Yet, an interpretation of entanglement as immanence has never been openly set out in the literature. Quantum science can be said to be a science of immanence, over against the entire history of science. Reality and consciousness are closely and deeply entangled stances, so they do not exist isolated. The measurement problem, or also the act of observation is grasped and explained differently once entanglement is incorporated in the corpus of science. This is probably the most fundamental achievement of quantum science (STAPP, 1993). In other words, the universe cannot be explained in the absence of life; moreover, the universe and life are deeply intertwined. To be sure, quantum entanglement is a much more robust relationship than, say, correlation. An immanent view of the world and reality means that consciousness cannot be merely an epiphenomenon and must have (serious) consequences in shaping the reality process. This claim is not to be taken as indicating consciousness creates reality. Instead, consciousness is in an entangled state with the physical universe, so much so that neither can be explained without the other. It is this relationship that gives meaning to any further phenomenon – the entangled relationship between subjective experience (i.e. consciousness) and the physical universe is life. Generally speaking, quantum entanglement brings out a networked view of reality and the universe in which there is no center no matter what, for what is truly relevant is the clustered relationship that acts as a map, as a graph or hyper-graph, and in which the entire web is much more meaningful than a single clear-cut part of the map or web. Properly speaking, the part highlighted is an abstraction and most probably a mistake vis-à-vis the global view gained or obtained. From this perspective, there are no hierarchies in the universe. The focus or emphasis on individual entities constitutes a serious hurdle for getting maps, networks or graphs. Individuality, moreover, entails centrality and hierarchy. In contrast, a quantum view of reality and the universe is an alternative to hierarchical comprehensions of reality, or also to individualized explanations of the world. Immanence can said to be the philosophy of quantum theory – when “philosophy” is taken in the broadest sense meaning logics or basis. Be that as it may be, the issue can be stated in different ways, as it has been, indeed, namely as the relationship between mind and matter, or between quantum physics and consciousness or also between mind and brain (or consciousness and brain) (SONG, 2018). In any case, entanglement allows for an intrinsically intertwined relation in which neither one extreme nor the other is fundamental or self-consistent. Matter, the universe, the brain, for instance, are subjects of experience, very much as the mind, consciousness or life are experiences themselves – hence they appear as having a rationale in one time, place or circumstance, and a different meaning and significance according to the way and depth of our experiences. Briefly said, quantum theory modifies radically the very conception and experience of matter, the world and the universe – as any other science, theory or philosophy has ever done. In other words, the universe experiences itself as a living organism via consciousness or intelligence, but intelligence or consciousness exists in a manifold ways. This leads us on to the next section. 4 Levels of consciousness and reality and the processing of information Consciousness can be explained not so much in ontological terms (“it is this or that”), but in terms of what it does. I shall claim that consciousness processes information, and it processes information in non-algorithmic ways. Processing information is an act, and action, an experience – a process. Strikingly but meaningfully, the human mind can understand what cannot be done algorithmically. Moreover, the mind is ultimately not algorithmic (KAUFFMAN, 2016; MALDONADO; GÓMEZ-CRUZ, 2017). Yet, vice versa, the universe, nature or the world are constantly looking (or caring) about itself and its environment – if one considers the responsive nature of Earth’s environment (LOVELOCK, 2000). The difference between consciousness and the universe is a difference of time scales – whence the differences between the types of information processing. The universe can be considered a living being; in this case, nature is alive. This means that there is no life in nature, as if nature (= the Earth) was a container of living beings. This is the crux of the argument. The argument that supports the life of nature can be traced back to geomorphology (THOMPSON, 1992), geochemistry (VERNADSKY, 1997), and the Earths’ physiology (LOVELOCK, 2000). However, within the framework of quantum science a clear support can be found in Kauffman (2016). A different approach to the issue can be brought out in the following terms: information processing, learning, memory, decision making, choice, predictive modeling, associative memory, sensory integration and control of behavior are all aspects of biological intelligence (BALUSKA et al., 2006). Still, consciousness and the mind pervade reality. Biology, thus, encompasses much more than the study of living beings, so much so that quantum science does not follow common sense. Consciousness and reality are closely entangled and the processing of information is the way in which the entanglement takes place. It should be stressed that consciousness – or mind - is not a singular human feature. Consciousness has been rightly associated with living beings at large, and not only, and not mainly, the great mammals – for it comes all the way down into the lowest levels of nature. Yet, within the framework of quantum science, consciousness is a feature that arises already from the very particles and waves (CONWAY; KOCHEN, 2006) that constitute it. To be sure, the strong free will theorem is certainly a strong defence for anthropocentric worldviews. It shows that particles and waves behave exactly in the way in which subjects of behavioral sciences behave; as a consequence, they are free in the strongest sense of the word; that is, they read the environment and act upon it by choice, and are not just unconscious responses to a stimulus. Free agency pervades nature (SOLÉ; GOODWIN, 2000). From the human point of view, as people grow up and learn new ways of processing information are developed (PENROSE; HAMEROFF, 2011). The very development of information processing occurs according to the evolution – of the individuals or the species. The nonlinearity of life means that living beings gain information – although not necessarily memory. Living is thus the process by which we gain information, and this is the very condition for learning. Any system that is capable of learning can adapt to the environment. Quantum entanglement is the process by which new information is gained and processed at the same time. All in all, the reality of the world depends on our observation. It is the theory what determines what we can see (Einstein). The observation is conscious, and consciousness transforms data into information, and information into knowledge. The physical reality of an object depends on how we choose to observe it (GILDER, 2009). Shortly said, we create our own reality. 5 Panpsychism, reconsidered Panpsychism adopts a twofold way, thus: on the one side, it is about the role of consciousness in reality, whereas, on the other side, it deals with life and its place in the economy of the universe. The second assumption is known as the question about the anthropic principle (BARROW; TIPLER, 1989). The first take is the most “orthodox” within the framework of quantum physics. Here I do not argue in favor of the anthropic cosmological principle, in neither its weak nor its strong version. The biases have been severely criticized and the consequences lead always to some form of religion or pseudo-science (WARD; BROWNLEE, 2000). Panpsychism turns out to be nearly identical to hylozoism and pantheism, and biocentrism . What appears in Figure 1 above as four different stances is after all a united framework. The name of such a framework is “life”. In simple words, consciousness can be here grasped as life. Classically stated, the question is whether consciousness affects reality by the act of observation. More radically, the question then becomes how life affects the universe by being and becoming. Quantum theory is after all, it seems, about the role of freedom in the universe. The universe is conscious and alive, simply because consciousness and reality are entangled, which therefore means that one does not exist without the other. Quantum science shows that quantum phenomena rely on superpositions – in other words, on possibilities. In the framework of the quantum world, possibilities are real, i.e. ontologically real. As S. Kauffman (2016) puts it, life is a physical property of the universe itself, very much as temperature, mass, energy, gravity, etc. Life and consciousness are not even emergent phenomena, but ever-present aspects of reality. In the same way, consciousness is a physical property of the brain, just very much like synapsis, the system of glands, or electro-chemical impulses. The question then about how consciousness or the mind arises from the brain or how life appears in the universe are wrong questions, for they are posed in terms of causality and its variants – emergentism (POPPER, 1995), and superseded relations (CHALMERS, 1996). If freedom is to make any sense at all in the universe, then consciousness is not an epiphenomenon, and life cannot be understood in terms of transcendence. Quantum science sets out the ground for freedom hereafter. 6 CONCLUSIONS This paper argues for a strong defense of panpsychism. However, by all means mysticism must be discarded here, even though panpsychism has been associated with mysticism. The claim here has not never been that consciousness creates reality. Rather, the contention of this paper is that reality is a living system – whence a conscious stance. Yet, reality as such (überhaupt) does not really exist. There are levels of reality – hence also levels of consciousness. The classical understanding of consciousness conceives of it as just witnessing the world. The world happens, and consciousness tries, as hard as possible, to grasp what has happened or what is going on “out there”. Quantum theory, on the contrary, allows understanding that consciousness acts upon reality – in acausal ways. To be sure, causality is not the only way in which action happens in the universe. It is not even the main way; it is just the way the classical science of western civilization says it happens. In a world in which consciousness is a mere witness freedom does not exist, it is an illusion. Consciousness is then a mere product of the objective world. In such a reality predestination, determinism and fatalism naturally predominate – very much as, for instance, the Laplace’s demon. However, if one assumes that consciousness and free will do not emerge with life, but as part of the universe, whence panpsychism is entirely justified, freedom is possible – moreover and paradoxically, freedom is unavoidable, inescapable. The universe or nature is the very realm of freedom, very much as consciousness is the unceasing experience of freedom. It should be highlighted that freedom coincides with randomness – a most radical openness, which goes against the notion that randomness is chaotic. Quantum mechanics tells us about the ultimate randomness of nature in more than fifteen different interpretations. Dealing with randomness and life are two sides of one and the same token. Nonetheless, one should not conclude that life is totally random; instead, randomness pervades life to some extent. Panpsychism disallows any form of determinism. It is freedom, after all – freewill, if you wish – that is finally at stake in this discussion. Life, it is claimed here, is about gaining degrees of freedom, and enhancing, enlarging or deepening the degrees of freedom already attained. As it is well known, the complexity of a system is proportional to the degrees of freedom the system has or exhibits. The more degrees of freedom a system has, the more complex it is. The mechanist interpretation of the world is wrong - very much as the deterministic interpretation of the world is wrong, too. Quantum science opens up the doors to a view of the world where freedom is possible – hence life is possible as well, not just an emergent property of matter.

### Nukes Link

#### The more that is produced, the more that is destroyed. Nuclear energy alienates humans from the natural world and gives us the power to bring about the end of the universe through our thirst for more.

Timofeeva 24 - Oxana Timofeeva is a philosopher from St. Petersburg and the author of Solar Politics, February 14, 2024 “Another End of the World Is Possible” [https://www.e-flux.com/notes/589795/another-end-of-the-world-is-possible] Accessed 2/17/25 SAO

If we consider the future of humanity, the question of energy consumption is crucial. Today, there exist three types of energy sources: 1) fossil fuels (oil, gas, coal); 2) renewables (wind, sun, water); and 3) nuclear energy (atoms). Each of these brings its own risks and harms, and each plays its own role in the drama of the apocalypse now being staged in the theater of human history: the burning of fossil fuels results in carbon emissions and climate change; renewable energy infrastructure contributes to biodiversity loss; and the threat posed by nuclear energy is associated with radioactive waste and techno-genic disasters such as Fukushima in 2011 and Chernobyl in 1986. In spite of the hegemonic discourses of sustainability and a smooth transition from “black” fossil fuel to “green” renewables, nuclear energy still offers much bigger productive capacities for late capitalism, with its rapidly growing scale of technological development. Nuclear power plants release energy from fission. Uranium atoms are forced to break apart, and the tiny particles thus released cause other uranium atoms to split, starting a chain reaction. But there is yet another type of energy, the most powerful ever known: fusion, or nuclear synthesis. As opposed to fission, in a fusion reaction energy is released when two atoms fuse into one (hydrogen atoms fuse to form helium). The amount of energy produced by fusion is several times greater than fission, and it does not seem to cause highly radioactive waste. This energy, potentially infinite and clean, creates a utopian horizon for the future of humanity. Technically speaking, the biggest and most powerful fusion reactor in our planetary system is the sun. The nuclear fusion constantly produced by the sun makes it the ultimate source of energy and of all life on earth. In order to colonize space, we would need to have something similar at our disposal, something like a solar substitute. For this, we have to create conditions similar to the sun on earth: extreme temperature and pressure that will force atoms to fuse. But we must also have the technical ability to control this reaction and sustain the superhot plasma necessary for it. There exist various fusion reactors around the world today, and most of them are tokamaks, which involve the heating of plasma. The problem is that they all consume more energy than they generate, and the conditions for sustaining the fusion reaction do not last long. As soon as fusion reactors reach the point of generating more energy than they consume, it will be possible to create new superpowered technologies for colonizing the whole solar system, including the sun itself. This will supposedly satisfy all the energy needs of humanity for many epochs to come. The Dyson sphere—or something similar to it—corresponds to the second level on the Kardashev scale, the transition to which will require colossal resources: in order to obtain enough material for building such a megastructure, future generations will have to disassemble the other planets in the solar system. All that we call nature will be destroyed for the ultimate megastructure, where humans, or those who come after us, will dwell on the captured body of the sun. Such techno-optimist utopias, especially popular in the mid-twentieth century, look to infinity. They do not consider global warming as an end-of-the-world scenario in the near future, but are rather preoccupied with cooling down the universe in a very distant future. The Dyson sphere is just one example of the fantastic belief that humanity can live as long as the sun itself, or even longer. The sun is not eternal, and after some billions of years it will transform into a red dwarf, then into a white dwarf, and then eventually cool down and die in the general process of entropy. One possible speculative solution to this problem is the so-called Dyson swarm: if humanity can manage to release an amount of fusion energy sufficient to colonize the solar system, then, using extreme amounts of stored solar power, it will be able to use the sun itself, before it dies, as a vehicle for traveling further, beyond the solar system. It will surround the sun in a swarm, and literally ride it to discover new suns and expand further into the universe. Philosophically speaking, such progression can be called a “bad infinity.” This is a Hegelian term which means something like an endless line or a movement that never reaches its final destination and does not really achieve anything. What is at stake here is a colonial model of extractive capitalism that projects itself into infinity. After colonizing the earth, we are supposed to proceed to colonizing other planets or even other galaxies, while destroying the territories that were already conquered for the sake of further advancement. There are ever new horizons ahead, and ever more debris behind. But there are alternative futurist fantasies, the most radical of which belongs to the Soviet philosopher Evald Ilyenkov. In 1956, he wrote an absolutely mind-blowing essay called “Cosmology of the Spirit,” a “philosophical-poetic phantasmagoria based on the principles of dialectical materialism.” This essay could not be published during Ilyenkov’s lifetime, and there are reasons for this: with the strongest evidence, the essay argues that the final cause of humanity and its ultimate mission is to destroy itself and the universe entirely. Translating the Hegelian idea of substance as subject into the language of dialectical materialism, Ilyenkov claims that matter is intelligent. The highest point of the development of thinking matter is human intelligence—not the intelligence that we have now, but the intelligence that will actualize itself in the future with the acceleration of progressive communist technologies, when humanity will ultimately expand to the Universe and become as perfect as God. As a Marxist, Ilyenkov did not believe in God, but he did believe in the advancement of the human spirit. The natural limit for its development is the process of entropy—the dissipation of energy in space and the cooling down of the universe. Ilyenkov asks: Is it possible to reverse this process? The task here is not to outlive the sun but rather to resurrect it by means of science and technology. According to Ilyenkov, the reversal of the process of entropy cannot occur naturally. Something needs to break the natural course of things. A conscious act. Entropy brings the world to death in cold and darkness. The opposite of this process is fire. And that is why we are here—to light that fire: At some peak point of their development, thinking beings, executing their cosmological duty and sacrificing themselves, produce a conscious cosmic catastrophe—provoking a process, a reverse “thermal dying” of cosmic matter; that is, provoking a process leading to the rebirth of dying worlds by means of a cosmic cloud of incandescent gas and vapors … In simple terms, this act materializes in the guise of a colossal cosmic explosion having a chain-like character, and the matter of which (the explosive mass) emerges as the totality of elementary structures, is dispersed by emissions through the whole universal space. Ilyenkov does not consider fusion, but only speaks about fission, which was more extensively researched in his time. In his theory, the smaller the particle, the greater the amount of energy released from its splitting—and he believes that future scientific and technological developments will tend towards breaking up smaller and smaller amounts of matter. If we manage to break up the smallest possible elementary particle, the entire universe will explode. The discovery of nuclear fusion makes this theory rather irrelevant, but this does not affect Ilyenkov’s broader argument about the ends of humanity. Be it fission or fusion—the splitting of the atom into two or the slamming of two atoms into one—this is what thinking beings, according to Ilyenkov, have to do: prevent the natural death of the universe by pressing some ultimate red button, intentionally destroying the world in order to make it reemerge again from the very act of its fiery destruction. And this circular movement of matter, the end of which coincides with its beginning, presents, according to Ilyenkov, a true Hegelian infinity mediated by intelligence: “Thought, as a result, also emerges as the very link in the universal big circle, through which the development of universal matter is contained in this form of the big circle—in an image of a snake biting its tail, as Hegel loved to express the image of true (as opposed to ‘bad’) infinity.” We can say that Ilyenkov’s cosmology presents a very peculiar version of the Big Bang theory, the temporality of which is inverted and inscribed into the old philosophical paradigm of cyclicity. Perhaps he was familiar with the work of George Gamov, who, in 1948, proposed the theory of the hot universe. Drawing on the ideas of Alexander Friedman, Georges Lemaitre, and other physicists who claimed that at the beginning of the universe there was an explosion, Gamow suggested that the primary substance for the explosion was not only very dense, but also very hot. What took place in this substance was a nuclear reaction; that is, the Big Bang was a big nuclear explosion. From Ilyenkov’s perspective, an explosion of this kind must be not a natural process but an intentional act, a violent intervention of thinking substance. This argument does not belong to natural science; it is not physics, but metaphysics; and yet this metaphysics is materialist and grounded in Marxism and dialectics. The dialectical core of his argument is very simple: the end of the universe becomes its beginning. There is no creation ex nihilo, but rather an immanent life of matter that rejuvenates itself by its own means. We are destined to produce a cosmic catastrophe just like the thinking matter of a past universe might have produced what our physicists call the Big Bang. This happened before, and will happen again. It’s a circle, a true infinity. Thinking substance is the connecting link between the end and the beginning. Its self-sacrifice gives birth to the universe an infinite number of times. The paradigm of cyclicity, with the central place accorded to fire as both destructive and creative primal matter, is very ancient. It comes from Heraclitus, an ancient Greek philosopher from the city of Ephesus. According to Heraclitus, fire is the “ἀρχή,” i.e., the beginning and the first principle of the world. One of the most famous of Heraclitus’s fragments (XXXVII) states: κόσμον τόνδε τὸν αὐτὸν ἁπάντων οὔτε τις θεῶν οὔτε ἀνθρώπων ἐποίησε, ἀλλ᾿ ἦν αἰεὶ καὶ ἔστιν καὶ ἔσται πῦρ ἀείζωον, ἁπτόμενον μέτρα καὶ ἀποσβεννύμενον μέτρα The ordering (cosmos), the same for all, no god nor man has made, but it ever was and is and will be: fire ever living, kindled in measures and in measures going out. This statement contains several paradoxes, and I would happily spend my life trying to exhaust the totality of its meanings, if it were not inexhaustible. Just think, for instance, about its original materialist premises, which must have sounded quite radical in the intellectual circles of Heraclitus’s time. The cosmos is not created by anyone; it is a constant immanent movement of change, fueled by the energy of the ever-living fire, and it repeats, so that the cosmological future of the universe is a mirror of the past. Heraclitus lived in 500 BC and did not know about fission, fusion, or—continuing into more recent speculative regions of physics—supernovas, whose energy release is said to be equivalent to the power of a 1028 megaton bomb. But we can surely say that his philosophical insights resonate with contemporary cosmic science. Given that the development of nuclear energy—what we call the “peaceful atom”—historically derives from scientific research around nuclear weapons, another idea of Heraclitus—namely, that war is “the father of all things”—also takes on a new aspect. War in this sense corresponds to Heraclitean dialectics: the universe is constantly in flux, always in becoming; everything passes into its opposite; nothing is permanent except change. Fire is the image of this constant movement of change. It is both destructive and creative, but more than that, it is rational. It sets the rhythm of the universe according to the rational principle and law called “λόγος.” This fiery logos is the immanent intelligence of matter, which it fuses together. Its ontological status is controversial: it is and is not at the same time. Parmenides of Elea (c. 515–c. 450 BC) is the opposite of Heraclitus in many respects. According to Parmenides, this way of thinking—that something both is and is not—is totally wrong. The truth is that what is, is, and what is not, is not. We can think of all that is, but never of what is not. In this sense, thinking and being are the same. Against Heraclitus, Parmenides insisted on the permanence of being and the illusionary nature of becoming. And yet it is in a poem by Parmenides, not one by Heraclitus, that, as Heidegger claimed in an interview, the atomic bomb exploded long before humanity ever came to construct it. What does Parmenides have to do with the atomic bomb? From Heidegger’s perspective, the atomic bomb is a logical consequence of Western metaphysics, which begins from what he calls “the oblivion of Being”: the metaphysical operation of blurring the difference between beings that are present (all kinds of things), and Being itself, which is not present. Heidegger believes that the very fact that a thing is—i.e., its very being—precisely is not, and our blindness towards that which is not but which nevertheless lets everything be prevents us from grasping the deep ontological complexity of the material universe. This is the essence of modern technology, which frames all historical experience as violence against the way things are. Within the paradigm of technology, grounded in post-Parmenidean Western metaphysics, things are simply present and available; the world as a sensual and meaningful coexistence is always already destroyed by a violent and objectifying technological worldview. It is interesting to see how, in the second half of the twentieth century, both the fear of nuclear weapons and the hope for nuclear energy draw from a common source of technological thinking. Nuclear energy promises never-ending growth and the cosmic expansion of humankind, while nuclear weapons threaten to annihilate humankind entirely. In fact, these two fantasies do not compete but rather supplement each other. What if, in parallel to the “peaceful atom,” the atomic bomb can be subjected to a similar dialectical logic of the “bad” and the “true”—not just bad and true infinity, but bad and true finitude, or the bad and the true end of humanity? Bad finitude would be nuclear war, which now stands as a kind of negative regulative idea behind our current global warfare and seems to serve as a geopolitical deterrent. Nuclear and thermonuclear bombs appear as an element of endless expansion and colonization that aims to outlive the sun, but they also invite us to accelerate its death in a nuclear winter. It is the dead end of the bad infinity of capitalist growth, inherent in its very logic: the more that is produced, the more that is destroyed.

#### The alternative is to adopt a quantum social ontology

Highland 21 - Grant Randal Highland, PHD Dissertation, Old Dominion University, Summer 2021 “Connectivism: Adopting Quantum Holism in International Relations” [https://digitalcommons.odu.edu/gpis\_etds/137/] Accessed 4/25/22 SAO

The social sciences, and international relations in particular, are in stasis. There are a number of reasons for why this might be, but there are two distinct rationales which are embedded within the term ‘social science’ itself. First, on the social side of the equation are the philosophical underpinnings of the broad swath of disciplines which fall under this category. In the dizzying and multi-variate realm of human interaction – economics, political science, psychology, sociology, etc. – the philosophical foundations laid over the millennia in the quest to understand humanity and our place in the cosmos has served to inform these later fields and the assumptions under which they operate. Likewise, the ‘science’ of these various disciplines has been predicated on the dominant Newtonian paradigm of classical materialism and have thus pursued epistemologies according to that classical ontological worldview. For both, the subject has become the object of scientific observation and philosophical inquiry, thus placing humans in the bifurcated and dichotomous role of both subject and object in a circular and tautological system of understanding. The problem stems from these foundational assumptions and ontological priorities which have informed both the philosophy and the science of the various fields, and for international relations as well. Trapped in these assumptions, humans have become schizophrenic arbiters of knowledge, diffusing Truth through the prism of an all-encompassing and pervasive dualism. If the social sciences are indeed science, and if the social sciences do in fact find their predicates in previous philosophical thought – what many believe to be the original science – and if, as asserted above, it is accepted the social sciences and international relations are in stasis, then it is my belief it is because the many disciplines have been operating off faulty assumptions which have created the dualism mentioned above. This dualism has a long pedigree and, from our western perspective, finds its beginnings in the Greek conceptualization of essential reality arising from measurement, proportion, and ratio. From Democritus, Aristotle and others, measurement represented the window into reality and in fact illuminated and enumerated that reality. From that Greek heritage our western philosophies sprung, producing during the Renaissance and Enlightenment the names to which we have become so accustomed: Thomas Hobbes; René Descartes; Francis Bacon; Baruch Spinoza; Gottfried Leibniz; John Locke; David Hume; and Immanuel Kant. These thinkers’ focus on rationality, empirical observation, and mind-body dualism – coupled with the successes of Isaac Newton’s scientific advancements – all served to create an ontology within western thinking and the academy which reified measurement and empirical observation as the means toward understanding our environment and reality. This is important to understand in the context of this work because our western heritage has emphasized a focus on the external world of things and matter – those things which can be observed by the senses – while bracketing, or otherwise offsetting, the mind and consciousness as something which exists, but is essentially irrelevant to our observations of nature and reality. This splitting of the subjects from the objects of their inquiry has created a dualism in our conceptualization of reality whereby humans are separated from the nature and reality they seek to understand. This has created within international relations a situation where the agents – the humans which make up the social collectivities of states, institutions and other forms studied in the field – and the structures described in international relations – anarchy, states, institutions, and power – are caught in an ongoing debate between the empiricist/positivist/scientific realist adherents within the field and the interpretivist/ideaist/post-modern, structural, etc., thinkers within international relations. This agent-structure debate has been waged for some time, now, and mirrors the dualism captured above. In either case, our field is the product of that philosophical and scientific genealogy and so, too, suffers from the subject-object dualism mentioned above. As Alexander Wendt puts it: On the positivist side, the ambition is to make social science as much like physical science as possible, generalizable and objective . . . while most positivists routinely attribute intentional states to human beings, the fact that these states are conscious is rarely considered, except perhaps as a methodological barrier to objectivity. Interpretivists mostly focus on what is public and shared, like language and norms, not on what is experienced by individuals.1 Consciousness, then, the very thing that makes us human and alive, has essentially found no home in the ‘social’ or the ‘science’ of international relations, leaving the humans of our social enterprise as essentially lifeless automatons subject to mechanistically deterministic fates as captured through our empirical scientific methodologies. It is a scientific and organizational view predicated on the cultural DNA of our past philosophical and scientific achievements which have been instantiated through the model of the industrial era. But what if that model no longer suffices in the realm of human organization and international politics? In this second decade of the twenty-first century where rapid advancements in technology, communications, computing, and transportation have accelerated the pace of globalization, and where international organizations and transnational actors have leveraged these advancements in order to exert greater influence beyond the traditional bounds of states and institutions, does our traditional focus on the external, measurable aspects of global politics provide adequate theoretical frameworks through which to understand these phenomena? While it might be true researchers can measure specific variables for a multitude of these factors and have in fact done so in compelling ways, do we nevertheless miss the nature of the forces driving these behaviors? In effect, do we miss the forest for the trees of our observational pursuits? It is my contention that this regressive theorizing whereby hypotheses are proposed, variables selected, then models created to test those hypotheses in the quest for parsimonious explanatory power has stripped us away from the very reality we seek to explore and explain and replaced it with exogenous variables which exist in the world without explaining why they exist. As a result, we tend to squabble over the types of trees that are best for examination while neglecting the forest which animates and gives those trees life. So, how then do the social sciences and international relations move forward if we are trapped within this ontological perspective? As Thomas Kuhn asks in The Structure of Scientific Revolutions, “Why is progress a perquisite reserved almost exclusively for the activities we call science?”2 His answer is progress: “To a very great extent the term ‘science’ is reserved for fields that do progress in obvious ways. Nowhere does this show more clearly than in the recurrent debates about whether one or another of the contemporary social sciences is really a science.”3 Within the field of social science, he posits, those practitioners are asking, “Why does my field fail to move ahead in the way that, say, physics does?”4 This, then, forms one of the core rationales for this exploration; an attempt to move international relations beyond stagnation and entrenched debates and into a new ontological perspective which will eradicate the dualisms implicit in our current ontological assumptions. But while progress is important in the sciences, so too is reflection and a revisiting of past foundational work to assess whether that which came before and has long been abandoned is worthy of reassessment. In this sense, the ‘social’ of the social sciences may be enhanced through a reinterpretation of past philosophical ideas through the lens of current scientific progress. In a way, I am proposing that for the social sciences and international relations to progress beyond the ‘Great Debates’ and subsequently regressive theorizing under the broader theoretical approaches of Realism, Liberalism, and Constructivism, then we must take two steps forward, and one step back. The basis for my thoughts on the social sciences stems from two sources. The first, which stimulated this exploration of the social sciences and international relations, comes from the debate between Hedley Bull and Morton Kaplan. In the debate, Bull argues for a more traditional, humanist approach toward understanding international relations, while Kaplan argues for a more systematic and scientific approach. As Bull asserts: The first proposition is that by confining themselves to what can be logically or mathematically proved or verified according to strict procedures, the practitioners of the scientific approach are denying themselves the only instruments that are at present available for coming to grips with the substance of the subject. In abstaining from what Morton Kaplan calls "intuitive guesses" or what William Riker calls "wisdom literature" they are committing themselves to a course of intellectual puritanism that keeps them (or would keep them if they really adhered to it) as remote from the substance of international politics as the inmates of a Victorian nunnery were from the study of sex.5 Despite Bull’s acerbic tone, he argues the use of scientific methodologies – specifically the building of models to test hypotheses of macro-systems – has replaced deep study and understanding of the philosophy and history of humanity which has been operationalized through human action versus systemic or statistical imperatives. Kaplan, on the other hand, rejects this and instead counters that: The traditionalists talk as if the newer methods have excluded philosophy as a tool for the analysis of international politics. Unfortunately, few of them – again Raymond Aron is a conspicuous exception – have demonstrated any disciplined knowledge of philosophy; and many of them use the word as if it were a synonym for undisciplined speculation.6 To Kaplan, it is the traditionalists who fail to articulate fully specified theoretical models against which to test their intuition and reading of history. As such, he argues it is the traditionalists who operate off implicit rather than explicit assumptions, and whose statements are usually made without reference to context, who are more likely to mistake their models for reality. In my mind, it is this debate which most succinctly and trenchantly captures the schism between the philosophical underpinnings of the ‘social,’ and the focus on scientific methodology of the ‘science’ in international relations. Bridges have been attempted to span the chasm but, to date, no unifying approach has closed the gap. The second source which initiated this journey is Alexander Wendt’s 2015 book, Quantum Mind and Social Science: Unifying Physical and Social Ontology where he makes the argument the social sciences, and international relations in particular, are in a state of stagnation necessitating a re-evaluation of the assumptions underlying the field in order to advance beyond the current debates which have thus far failed to address or enhance our understanding of state interaction in this second decade of the twenty-first century where globalization, social movements and nationalist/populist movements are growing at a seemingly increasing rate. In this pursuit, Wendt seeks to rectify physical and social ontology by making a bold claim that the social sciences need to abandon the physical, materialist ontology which has dominated within the field since its inception, and instead adopt a quantum, social ontology as the preferred referent through which to better understand the human dimension of the social sciences. As he asserts: In this book I explore the possibility that this foundational assumption of social science is a mistake . . . More specifically, I argue that human beings and therefore social life exhibit quantum coherence – in effect, that we are walking wave functions. I intend the argument not as an analogy or metaphor, but as a realist claim about what people really are. Scholars have long pointed to a number of strong analogies between human and quantum processes: between free will and wave function collapse, the holism of meaning and non-locality, observer effects in psychological experiments and quantum measurement, and even double-entry accounting and quantum information. These and other analogies are sufficiently suggestive that one might apply quantum thinking to social life simply on that basis.7 He stakes a realist claim that our preoccupation with and grounding in Newtonian mechanics has privileged the external world of observable matter and things over the subjective, internal experience of the world through our conscious awareness of the environment. While the book is largely a philosophical exploration of the possible reorientation of the field quantum mechanics might help facilitate, it is nevertheless a scientific realist take on the application of quantum science as an attempt to re-center humanity and agency within international relations to move the field forward. In other words, Wendt’s quantum turn is an attempt to adopt quantum science as the path toward unifying the split between the ‘social’ and ‘science’ of our field; a scientific realist claim which would subsume the philosophical aspect of human understanding and knowledge and place it squarely in the realm of quantum consciousness whereby the dualisms already mentioned would be eradicated through the quantum perspective. To be perfectly opaque, I agree with all the above. For too long the divide between the social and the science of international relations has been predicated on the faulty assumptions mentioned above which have created a self-imposed barrier between the subjects and objects of our inquiry. As such, I share Wendt’s perspective, but I also seek to expand upon his work by trying to understand the nature of reality and humanity’s role within it. To that end, it is important to focus on the science behind quantum mechanics, but also to maintain a focus on the philosophy undergirding not only what constitutes reality, but humanity itself. What does it mean to be human? What does it mean to be a conscious, subjective person within the connective tissue between other humans and the reality we all inhabit? Are there philosophical insights from the past which have already predisposed humanity toward perceiving and understanding quantum mechanics/reality in this era of rapidly advancing technological and scientific discovery? I will argue the current scientific context of both quantum science and an everincreasingly connected global citizenry has set the conditions for a new perspective – a new paradigm if you will – whereby the social sciences are on the cusp of adopting a quantum approach of probability and potentiality versus the clockwork mechanistic determinism of cause-and-effect Newtonian mechanics. I will argue further that while, like Wendt, I maintain a scientific realist approach toward the application of quantum science to the social sciences – a progressive move forward as has occurred in many of the natural sciences as they adopt quantum perspectives – there is a valid reason international relations should also consider and adopt the philosophical worldviews outside the genealogical canon of our early western forbears, as well as the philosophical explorations of consciousness and humanism – a unified holism – which have evolved over the years**.** Marrying the quantum physics of consciousness and reality with the philosophy of phenomenology and humanism will lead toward a deeper, more holistic understanding of our connection to each other as human beings, and our connection to the world of our creation through this conscious experience of each other and our surroundings. This is an attempt, then, to move the science of international relations forward, to progress from a Newtonian world of externality and things to a quantum world – fused with the historical foundations of eastern, tribal, and phenomenological philosophical inquiry – where subjects and objects, structures and agents, and even the social and science are unified in a holistic and comprehensive manner. In a sense, I argue we need to back into the future of scientific inquiry and application while keeping our eyes on the historical thought of the past which has helped define our humanity. Connectivism This unifying reorientation away from classical science toward a more holistic quantum application of science and philosophy is what I term Connectivism. Rather than privileging a Hobbesian view of nature as a war of all against all – conflictual, violent, power oriented and driven by external forces – it is my belief Connectivism will privilege the unifying principles which connect us all to each other, and all to all. This relational social ontology will highlight the more cooperative and interconnected aspects of the human experience versus the Newtonian dynamics which separates humans from their environments and turns them into simply another material variable upon which external forces exert their impact on – and determine the behavior of – the human dimension. As mentioned above, this separation of the human subjects from the objects of their observational scientific pursuits has created a host of dualisms which have permeated both philosophy and science. From the dual monism of Descartes’ provenance – or the mind-body problem in philosophy – to the agent-structure debates within international relations, an epistemological focus on the external world of things in the ontological world of Newtonian mechanics has created a false dichotomy between subject and object – observer and observed – and has created a wedge between humanity and the environments they seek to understand. A quantum holist ontology, on the other hand, will destroy the dichotomy between agents and structures, individuals and societal collectivities, as well as the mind-body/dual monism problem of philosophy. This unified ‘whole’ which is instantiated through conscious individual, interrelational, and interactional processes of potentiality (i.e., wave functions) and realization (wave function collapse, or decoherence) privileges and situates human agency and its creative impact on the environment in a more comprehensive and cooperative way. In this manner, not only will Connectivism eradicate the dualisms noted above, it will also eradicate the dualism between philosophy and science in a quest to better understand international relations.

### Impact

#### Failure to solve ontological alienation in energy policy causes serial policy failure and ecocide

Bellamy and Diamanti 18 - Brent Ryan Bellamy, professor at Trent University and Jeff Diamanti, Assistant Professor of Environmental Humanities at the University of Amsterdam, in Mediations: Journal of the Marxist Literary Group, Spring 2018 "Phantasmagorias of Energy: Toward a Critical Theory of Energy and Economy" [https://mediationsjournal.org/articles/critique-of-energy] Accessed 3/21/25 SAO

The critique of energy sits between two fields that condition the present — environmental catastrophe and capitalist crisis. Marx wrote that the past “weighs like a nightmare” on the living.1 With global warming and the interminable crisis of capital, it is not just the past but the future, too, which strikes fear into the human mind. During the ongoing industrialization of the planet under capitalism, fossil fuels have been the dominant source of energy to power economic expansion and political domination.2 The very fabric of today’s climate crisis is knit from the exhaust of intensive and extensive waves of capital accumulation. Typically framed as a consequence of bad consumer habits, the environmental problem of energy is and always has been deeply bound to the material origins of the commodity form — what it takes to make a thing and what it takes to move it. Today, the lion’s share of emissions come from transportation and production sectors of the industrial economy. By almost every projection, the simple reproduction of existing systems of production and distribution, to say nothing of their growth, will doom the planet to a host of ecocidal developments — from rising sea levels and ocean acidification to desertification in some places and more intensely concentrated rainfall in others. Against the weaving of such catastrophic tapestries, pundits of the coming energy transition spread solace with the techno-future vision of a world that could be different than the one currently soaked in hydrocarbons. Yet these proponents of technologically smoothed energy transition miss the forest for the trees: the question is not simply one of engineering, but instead how to overcome the deep roots of capitalism’s ever-growing energy dependence. Whether for the requirement of aggregate economic growth or the expansion of new horizons of value, capitalism has been historically and logically bound to ever-increasing quantities of energy. The core contradiction of today’s economic system is and always has been tied to its facility with energy. A critical standpoint on the conditions of political, economic, and ecological possibility requires a new account of energy’s historical function, which is to say, a new account of energy’s relationship to the production, distribution, and accumulation of value. This issue of Mediations, draws its articles from the edited collection Materialism and the Critique of Energy (MCM´ Press, 2018). Both develop a critical standpoint, first, by revisiting the entangled conceptual and material history of capital and energy at the foundations of materialism and, second, by clarifying the stakes of a critique of energy for contemporary critical theory and politics.3 While the condition of climate change today has occasioned a groundswell of interest in energy regimes and environmental systems, only the materialist critique of energy found at the heart of Marxism can explain why capitalism is an energy system and hence offer a clearer sense of a way out of its fossil-fueled inertia.4 This collection distills a form of energy critique both sensitive and hostile to the many forms of inequality, injustice, and exhaustion that populate the contemporary political landscape. Materialism has a long history. Though materialism’s roots as a philosophical project stretch further back than the nineteenth century, we are concerned with its turn toward the material structures that began shaping social life in a quickly industrializing Europe. Current understandings of both energy and materialism were forged in the furnace of coal-powered innovation. The coeval emergence of industrial capitalism and self-consciously materialist thought is not mere coincidence; nor can their historical emergence be explained as simple causal determination. Rather, we argue, their emergence must be understood dialectically, beginning with a critical recognition: the materialist tradition that emerges out of this moment is already terminologically and epistemologically connected to the industrial flares of a fossil-fueled world. From Ludwig Feuerbach, Marx, and Friedrich Nietzsche to twentieth-century critical theory, Marxist-feminism, and the multiple post-humanisms and new materialisms emerging today, streams of different materialisms flow: each is historically shaped by the industrialization and globalization of fossil fuels.5 This is particularly urgent given that this materialist tradition, after Marx, remains the basis for the most viable critique of the political-economic system, capitalism, whose rolling crises appear increasingly indistinguishable from the looming problems of energy and climate. Materialism has developed two modes of tracking energy that demystify the force unleashed by fossil fuels: on the one hand, through the critique of political economy; and on the other, through a theory of materiality contoured by the access to deep history and cosmic space made available first by coal and eventually by oil and natural gas. There is a historical dimension to these trajectories. The methodological and theoretical development of Marxism, the tradition most strongly associated with the first of these two modes, begins in the 1840s within the contemporaneous surfacing of the theory of energy across Britain, Prussia, and France. What this means for materialism as it evolves from Feuerbach’s treatment of Christian reason to Marx’s critique of capital is that energy is dialectically bound to economic history — not a concept or variable independent of it, but a structuring force without which capital could not operate. Following this originary recognition, energy slipped away from materialist understanding until Walter Benjamin intervened to articulate a materialist revision of cosmic time. His dialectical apprehension would identify the stylistic force of energy over and above its positivistic or physicalist concept. Energy, through Benjamin’s gaze, becomes a materialist concept once more. The following three sections introduce these developments in turn. Marxism and the Origins of Energy Critique Marxism could be said to have two births. In the first, the fires of the Industrial Revolution breathe forth a concatenation of social conflict from which the labor movement and international communist movement emerge. But a different kind of Marxism is also nascent in the mature phases of the second scientific revolution. In the late-eighteenth century, from the principles of motion, Newtonian mechanics, and models designed to exhibit scientific discoveries came political economy, industry, and the tools of the industrialist’s trade. Sadi Carnot (1796–1832) famously drew up a theory of the caloric from simple observations of the steam engine, and Hermann von Helmholtz (1821–1894) refined his ideas about the conservation of energy in observations of muscle metabolism.6 The work of the body and the work of the machine, once ignited by the roaring furnace of fossil fuels, allowed for the redefinition of the conceptual constellations of science. In the collision of the industrial and scientific revolutions a new set of variables emerged: energy and work; wealth and value; labor and capital. At the dawn of the nineteenth century, developments in production and economy — mixed with increasingly sophisticated accounts of what in the eighteenth century was still called vis viva or living force — occasioned the simultaneous discovery of energy. By mid-century, Lord Kelvin (1824–1907), Julius von Mayer (1814–1878), Rudolf Clausius (1822–1888), and Hermann von Helmholtz arrived at more or less the same law of the conservation of energy. Thermodynamics emerged from this cauldron of scientific and industrial exchange as a key field of knowledge. Its theories stated that the total energy of an isolated system is constant and that energy can be transformed from one form to another but can be neither created nor destroyed. The theory of energy as it unfolded in this crucial decade did not descend from the heavens but bubbled up from the hidden abode of industrial production. This is the remarkable insight offered by the twentieth-century historian of science, Thomas Kuhn, whose analysis of the “simultaneous discovery” of energy conservation frames the paradigm through which energy would emerge — as much the effect of economic history as it is an outcome of scientific discovery. He opens his 1956 essay with a query: “Why, in the years 1830-1850, did so many of the experiments and concepts required for a full statement of energy conservation lie so close to the surface of scientific consciousness?”7 Kuhn approaches an answer to his question in the form of a threefold hypothesis. First, the scientific and industrial instruments of the 1830s made available multiple instances of the conversion process from water, wind, wood, and coal into motion or thrust.8 Second, the dominant investment driving scientific discovery was the economic “concern with engines.” And third, the “philosophy of nature” running through Gottfried Wilhelm Leibniz, Immanuel Kant, Friedrich Wilhelm Joseph Schelling, Johann Gottlieb Fichte, and their shared Naturphilosophie made German thinkers, but British and French scientists as well, “deeply predisposed to see a single indestructible force at the root of all natural phenomena.”9 When Kuhn makes reference to something like “scientific consciousness,” he means it as both a cause and an effect of — at least in the case of the doctrine of energy — an emergent mode of understanding the economic, technical, and philosophical coherence of force. Put differently, the “scientific consciousness” responsible for the doctrine of energy helps generate, and in Kuhn’s account is symptomatic of, the emergence of a new mode of production: industrial capitalism.10 The emergence of the doctrine of energy and Marx’s materialism in the mid-nineteenth century is not sheer happenstance. Rather, their emergence is mutually implicated in industrial phenomena. The decisive shift from the problem of alienation in Marx’s early writings to the more technical language of labor power of Capital signals a growing awareness of the historical and social specificity of energy flows bound to the worker’s exploitation. Terminologically, labor power is identical to Helmholtz’s word for the work of energy (Arbeitskraft), which, as Anson Rabinbach reminds us, had been rapidly popularized across public science circles since late 1840s in Western Europe.11 As a technical term for the value form of human work in the factory too, labor power simultaneously names the objective consistency between the worker’s caloric output, the coal power expressed in machinery, and the abstraction of both forms of Arbeitskraft by the value form of capital at a more general level. Arbeitskraft is the concept Helmholtz had been using in the 1840s to distinguish energetics from vis viva or living force still resonant with the scientific epistemology of the previous century. Between the 1840s and the 1850s, Marx had changed his thinking on the core concepts that would animate his critique by the time of Capital in 1867. Rabinbach argues that by positing Arbeitskraft Marx finally had access to the concept necessary to conceive of capitalism as a totality. This means that Marx’s more developed critique of political economy, sensitive as it is to the energic content and calibration of Arbeitskraft, already contains a critique of energy. By naming the commodification of human work labor power, Marx alerted his readership to the twofold abstraction taking place in the production process: human exertion becomes a flow of energy in the concrete, while at the same time being modulated by the value form of capital in the abstract.12 The calorie burners of a human body offer a relatively inefficient source of physical energy compared to even the heat and light released from burning a piece of coal. Yet no lump of coal ever got up and threw itself into the furnace of the steam engine. Capital thrusts human and fossil energy together to extract surplus value from the former but at a greater and greater magnitude due to the energic efficiency of the latter. Once the conditions for industrial capital are in place, neither coal power nor labor power can produce surplus value independent of the other because each form of energy congeals unevenly into, and is in turn socially regulated by, what Marx calls the “organic composition of capital.”13 Marxism offers a developed concept of energy by taking note of just how entangled the capitalist compulsion to increase productivity and the generalization of coal power were. If capitalists could keep the factories open around the clock, then they might also seek to implement the ever-profitable “curtailment of the necessary labour-time” by implementing labor saving techniques and machines.14 Later, Marx adds that “[t]he same causes which develop the expansive power of capital, develop also the labour power at its disposal. The relative mass of the industrial reserve army thus increases with the potential energy of wealth.”15 In this sense, Marx’s notion of labor power and its social regulation are inextricably connected, via the dialectic of forces and social relations of production, to the energic capacity of a given place and time. Marx’s concept of labor as it evolves over the course of his writing registers, among other things, the radically disruptive and uneven process of fossil energy’s integration into the social relations of production. Both a familiar and a novel relation to energy is at work across industrial capital at this time — from muscle-bound forms of human and animal labor to productivity-lending machines in the factories. The energy innovations of water- and steam-powered production reduce the amount of labor time required to produce a given commodity by a worker of average skill and productivity. The influx of water- and coal-powered machines into the site of production shift the balance not only in labor’s intensity, but also in its worth. The environment through which labor was organized and sustained was submitted to constant revision as capitalists dug deeper into the dirt to build waterways for mills and unearth new sources of coal. In essence, the new regime of energy generates a radical transformation in the character of the labor-capital relation. Counter to orthodox histories of the industrial revolution that posit coal power as a cheaper and thus natural replacement to wind, water, and wood, Andreas Malm offers a unique account of this historical transformation into a fossil-fueled industrial economy. Malm outlines the ways in which coal-powered steam engines offered a solution to a labor problem plaguing British capitalists: namely, how to bring the site of production into the urban spaces where the newly dispossessed were gathering.16 Coal power, according to Malm, did not rise because of its relative cheapness, but because of the ease of transporting coal as compared to transporting water power, which had to remain proximate to the waterways. At its origin then, fossil capital increased the productivity of a newly minted proletariat in the same moment that it generated their class relation to the new mode of production. Put concisely, the proletariat became materially bound to the industrialization of fossil fuels; one becomes unthinkable without the other. Why Energy Needs Dialectics and Why Materialism Needs Energy Marx reconciles the critique of political economy with the otherwise positivistic concept of energy dominating scientific inquiry, yet he does so with a dialectical twist — showing energy and labor as immanent to one another — that turns energy into a moving target. Marx’s treatment of energy occurs shortly after Feuerbach inspired a new direction in materialism. Energy became a core component of historical materialism when Marx connected the surge of physical force in the production process to a twofold abstraction of human labor — on the one hand by coal-powered industrialization and on the other by the value form of capital. Yet the concept of energy developed along alternative genealogies in nineteenth- and twentieth-century materialism, becoming an index of how materialist thinkers imagine their relationship to the physical and the metaphysical. Briefly tracking one such genealogy, we offer an account of how the historical particularities of energy’s systematic usage inform its concept and figure. These particularities include the social, economic, ecological, and political environments in which energy is put to work. In the history of materialism in the twentieth century there are a number of vital encounters with energy, staged at different levels of abstraction. Consider for instance the figure of the eternal return so important to Nietzsche and troublesome to Benjamin: “What, if some day or night a demon were to steal after you into your loneliest loneliness and say to you… ‘The eternal hourglass of existence is turned over again and again, and you with it, speck of dust!’”17 Here, Nietzsche personifies the eternal return popularized by thermodynamic theory. The idea being that a cosmic logic is independent of the ephemeral and self-involved history of human reason. In the person of the demon, the eternal return marks the irony of human finitude and the metaphysical tradition on which Nietzsche leans to make a point about cosmic infinitude. Turn to the famous section 1067 of Nietzsche’s notebooks, The Will to Power, and both the paradigm and promise for thinking this eternal return become more explicit: “And do you know what ‘the world’ is to me? Shall I show it to you in my mirror? This world: a monster of energy, without beginning, without end; a firm, iron magnitude of force that does not grow bigger or smaller, that does not expend itself but only transforms itself.”18 Nietzsche turns the law of the conservation of energy into a metaphysical conceit, a new concept of history divorced from the moral, ethical, and philosophical constructs he found so intolerable. Rather than as a flow made historically contingent, energy, for Nietzsche, is encountered as the world as such. When Nietzsche drew the thought experiment of the eternal return out of the law of the conservation of energy, he may or may not have had Frederick Lange’s monumental book History of Materialism (1866) in mind, but to Benjamin the connection to Lange verified a certain theoretical underdevelopment. Benjamin sees in Nietzsche’s words the traces of a mode of thinking that is taken with its own image. By the early twentieth century, energy had begun to emit a philosophical tendency contemporaneous with its industrialization and figured as ungraspable and inexhaustible growth.19 Both Nietzsche and Lange had certainly encountered the materialism of Louis Auguste Blanqui (1805–1881), even if their references to the communard were infrequent. Blanqui’s appearance in the first volume of Lange’s History of Materialism closes a poetic sequence opened by Lucretius in De rerum natura. Lange drew conclusions about the fate of materialism from Blanqui’s cosmic concept of the eternal return: It is interesting that recently a Frenchman (A. Blanqui...) has carried out again, quite seriously, the idea that everything possible is somewhere and at some time realized in the universe; and, in fact, has often been realized, and that too as an inevitable consequence, on the one hand, of the absolute infinity of the universe, but on the other of the finite and everywhere constant number of the elements whose possible combinations must also be finite.20 When Lange tied the (in)finitude of being to the fundamentals of materialism, he did so with what was only a faint expectation of its thermodynamic implications. Yet, Lange’s reading of Blanqui supplies the metaphysical coordinates that appear in Nietzsche’s eternal return. Moreover, this reading also defined the material elements in a way that would prove necessary for Benjamin’s materialist conception of the cosmic. As Benjamin conducted his research on Baudelaire, he uncovered a connection between Blanqui’s cosmic criticism and Nietzsche’s eternal return, and he did so, as we know, in the midst of the early rumblings of German fascism. Benjamin’s insight into the sociopolitical appearances of energy’s force comes first in the form of a preemptive critique of the fascistic cult of technology: It is the dangerous error of modern men to regard [ecstatic contact with the cosmos] as unimportant and avoidable, and to consign it to the individual as the poetic rapture of starry nights. It is not; its hour strikes again and again, and then neither nations nor generations can escape it, as was made terribly clear by the last war, which was an attempt at new and unprecedented commingling with the cosmic powers. Human multitudes, gases, electrical forces were hurled into the open country, high-frequency currents coursed through the landscape, new constellations rose in the sky, aerial space and ocean depths thundered with propellers, and everywhere sacrificial shafts were dug in Mother Earth.21 The great surge in forces available to twentieth-century military and industry struck Benjamin as modern man’s contact point with the flux of the cosmos — a new “physis” consisting of rhythms, temporalities, and spaces previously reserved for the gods. In Benjamin’s critique, the internalization of that force did not express an inversion whereby technology dominated man, as the techno-utopian mastery of nature had in World War I.22 The surge in energy expressed in the war was conditioned by capital. To imagine otherwise was either to be entranced by the mystique of the cosmos or by the mystification of industrial capital. In Benjamin’s treatment, the way all three thinkers — Blanqui, Lange, and Nietzsche — were absorbed in the concept of eternal return was a feature of thinking about the world industrially. Benjamin, in other words, interpreted the conceptual apparatus of the eternal return as reified thinking — a failure to historicize that thus mistakes a perfectly consonant image of the present for being itself: a thought that bubbles up out of production so pure and unadulterated a product of its circumstances that its provenance (and thus historicity) becomes unrecognizable. It was as if they were looking at an autostereogram of factory smoke and seeing the birth of being. If for Nietzsche “the world” is “a monster of energy, without beginning, without end” whose only will is “the will to power,” then “the world,” for Benjamin, is still tied to what he called, following Baudelaire, the phantasmagoria of industry — a world too tied up with industry to recognize the historical specificity of thought.23 This realization defines the allure with which Benjamin archived Blanqui’s anticipation of Nietzsche’s eternal return and, in good Benjaminian fashion, tied it to the historical condition that binds both together. Cut from the same cloth, Benjamin says, the “cosmic speculation” that both men engage in signals a new stage of materialism — a critical state fully responsive to the energic content of history.24 Alas, both Blanqui and Nietzsche are, in Benjamin’s words, from a “century… incapable of responding to the new technological possibilities with a new social order,” which is to say a standpoint out of phase with the technological rush that rapidly overtakes political thought.24 By the time Benjamin took his own life at Portbou, it looked like that incapacity had extended to the twentieth century as well. Benjamin was overcome on more than one occasion by matter, but this is not the same as saying that Benjamin was a new materialist, much less a new (or old) matter-ist. For in his account the problem with the eternal return of energy is that it provoked an unmediated image of industrial progress, rather than a dialectical one. Here we see the aesthetic force of capital’s facility with industrialized energy fully formed: the fossilized mode of production projects an image of itself as a world. In order to move from the phantasmagoric to the dialectical, we will always need one eye on value and one eye on the cultural modulation of nature, lest we turn to either a vitalist new materialism allergic to historical determinability or a thermodynamic desocialization of value immune to the political. The theoretical appearance of the eternal return as cosmic speculation is qualified by the rupture of fossil fuels, even if Benjamin does not yet fully grasp the systemic capacity that capital has drawn from them. It is clear enough to Benjamin that the war machine facilitated by capital drew unconscionable power from the earth’s depths, and that this power was dislocating, violent, and significant at a cosmic level.25 Neither Nietzsche nor Blanqui were wrong in their phantasmagoric image; rather, it is in their interpretation of the outcome that both skip over the historical conditions from which a reified concept of energy is made possible. Occasioned by the new concept of energy supplied by the industrial image of thermodynamics, these cosmic speculations verify the stylistic appearance of energy beyond any immediate experience of it and the incomplete project of critically grasping how it contours historical experience. That is, even if Benjamin is alert to the way in which fossilized energy itself leads to a materialist notion of cosmic time (or a geological time-scale, as we will later term it), his temptation by the cosmic is proximate to the deep time drawn up by fossil capital. This cosmological element in Benjamin’s thinking is sometimes seen as the aberration in his claim to materialism, a similar kind of idealism to that which he takes issue with in the “eternal return” as it appears in Nietzsche. Benjamin’s “cosmic time” itself functions as another example of a kind of energy unconscious (like Nietzsche’s and Blanqui’s failure to historicize the concept on Benjamin’s account): Benjamin, in other words, does not fully grasp how the burning of crystallized cosmic-time in the form of coal undergirds industrialization; yet, as with Nietzsche before him, he somehow apprehends the consequences of energy’s historically specific stylistic expression, without yet knowing precisely how energy figures in the project of critical materialism. The burning of the fossilized carbon locked away in long-dead plant and animal matter generates a decidedly new, indeed unprecedented, historical situation. Yet this assertion does little to discredit Blanqui, Lange, Nietzsche, or Benjamin; instead, it simply situates the eternal return on a geologic time-scale. Ashes to ashes, dust to dust, yet energy passes on for all of time. The problem, for us, is that we live in a fragile habitat, and that fragility is relative to a human standpoint already conjoined to radical social inequality. As Malm writes in Fossil Capital, “the causal power of the past inexorably rises” once capital becomes fossil fueled.26 One cannot separate the cosmic order made available as image to Blanqui and Nietzsche, and in Benjamin’s critique of them, from the economic order of the industrialized energy system. Fossil capital’s burning away of condensed energy from past eras, previously sequestered in the Earth, catches up with the present in the form of billowing emissions that wrap the planet in a warming blanket. The industrialization of energy also produces a vantage from which to assess the ontological status of energy and its residues. Energy’s economic elasticity and social plasticity in the form of fossil fuels, especially once oil becomes the dominant source of global energy in the 1950s is one kind of theoretical problem; its consistency — its unique immunity to creation and destruction — is yet another. Historical materialism was built for addressing this kind of challenge. Whence, then, a critical theory of energy? Where is energy in the critique of capital: an input on the side of labor; a force of production on the side of capital; or, is it somewhere else? Like most good questions, this one also has two sides. On one hand, if what interests us is the political economy of energy, we can turn to Marx’s own embedded critique of energy. Historical materialism is born in the same breath as the doctrine of energy conservation, not as a version of it, but as a rejection of its uncanny claim on value, history, and labor. For a political economic framing of energy and capital, one might search out the technical location and impact of energy in general on the composition and scientific critique of capital. One might look, for instance, to the human and animal calories per kilojoules of fuel extracted, to the length of the workday, to the organic composition of capital, and to the level of capital’s reliance on energy from fossil fuels to maintain intensive gains year after year. On the other hand, if what interests us is a critical theory of energy, we can follow the conviction that Marxism works best when it conducts immanent critique rather than an intransitive orthodoxy, and ask: how are the core concepts that Marxism takes as its own transformed by the late twentieth- and early twenty-first-century experiences of energy substitution at the site of production and mounting impact of climate change everywhere else? This approach relies less on process and outcome. Turning to an ontology of energy, it points to a different order of question, and it has as much to do with the influence of Lucretius on Marx’s materialism as it does with Blanqui’s impact on the landscape of critical thinking in the twentieth and twenty-first centuries. Materialism and the Critique of Energy Patricia Yaeger has asked how humanists and social scientists might reconceive cultural history in light of the energy regimes that underwrite it. This same question might be asked of the history of theory: what is critical theory in the age of wood, wind, coal, and oil? Answering the question means clarifying the social structure of energy regimes offered across various traditions. Teresa Brennan, for instance, brings the work of Marx much closer to the economic and environmental impasse named by late fossil capital in her book, Exhausted Modernity (2000). Labor, Brennan insists, is an all too human category for Marxism’s critique of the labor theory of value. She argues that it moves too far in the direction of objectified nature to allow us to return to an ecological standpoint. To think the critique of the Gotha Programme while reading Capital provides one solution: against the orthodox position that only labor provides value — and the cult of the (masculine) body that flows from this position — the rejoinder that nature provides it too must be read back into the critique of the mode of production that depends upon labor power as well as labor’s minimization. For Brennan, arriving at this point entails adding the “law of substitution” to the Marxist critique of capital. The “law of substitution” follows from a critique of political economy without a subject, where labor power is an embodied force, but one that is nevertheless consistent with the other forms of ener: mechanical, chemical, electrical, atomic. Thinking about energy and labor in these terms achieves a kind of total mapping of what might be called the labor-energy relation. Brennan writes, “time is out of joint.… We smell this around us and know it in our bodies. We console ourselves with the myths of hybrids… while living the divide between a speedy fantasy that overlays us and a natural time that knows it is running out.”27 The rising organic composition of capital squeezes tiny quotients of labor from ever more immiserated and precarious bodies. The concrete and electrical world of fixed capital weighs heavy on the critical and ecological will of the polis. At the same time, for Brennan, labor becomes at once calories, carbohydrates, lipids, protein, and depletion as well as consciousness, language, and international and gendered division. Brennan figures labor as at once matter and materiality — its relation to the environments in which it finds itself embedded is exogenously and endogenously regulated by flows of energy. As such, value begins to disappear as it bleeds in the background of the various flows of the “law of substitution.” In this way, Brennan’s work risks folding labor power back into the world of nature. It stops short by tying capital’s use of energy to socially necessary labor time, threatened ever increasingly by the “violent conversions” of capital’s energic disposition. As Elmar Altvater reminds us, nature is “not value-productive, because it produces no commodities to be sold on the market.… [I]t is labor which turns nature into commodities.”28 Moreover Anna Tsing argues that nature is instrumentalized all the time as use value necessary for exchange value — as resource and as standing reserve — though, at any one time, the vast majority of it never enters this relationship quantitatively.29 Instead, the standing reserve of nature gets reconfigured as either carbon sink or fuel in the age of fossil capital. Yet just as true for materialism and the critique of energy is the corollary claim implied by Brennan: namely, that labor power is itself a social relation produced out of capital’s economization of energy’s physical force, a relation that is suffused as much with electrical currents and data flows as it is with blackened carbon-full skies and bleached oceans. The question for today’s materialism would thus seem to pivot back and forth between the question of where value comes from, and how to locate energy in the production and destruction of economic, social, and natural environments. However detached, Marxism’s theoretical inversion of energy into the dynamic of capital’s reinvention of labor is not purely conceptual, and coming to terms with the entanglements of capital and energy regimes from the vantage of Marxism necessarily engages in a dialectic of historicity — a coming to terms with the present as a historical moment, rather than as an empty totality, a plurality of pluralities, or an eternal return. It is to historicize, as Benjamin did for Blanqui, the temptation to think the eternal return of energy — the seduction of metaphysical immunity from economic and ecological catastrophe. If Marxism is to stay true to one of its guiding insights — that “[humans] make their own history, but they do not make it as they please” — it must renew its habit of attending to the pivot located in the critique of energy.30 The central insight that historical materialism brings to a theorization of energy is that the relation we have to fossil fuels, and indeed to all forms of generating, capturing, and storing or distributing energy, is form determined by value. Edison’s major innovation was not the filament that would illuminate a glass bulb, but the grid that would distribute electricity from the point of its generation to the point of its consumption. He created the mechanism whereby energy could be brought to market. In this way, market relations, and the capital-labor relation underlying them, came to effectively mediate not only the price and draw of energy, but also which energy source would dominate economic capacity, turnover time, and the technical composition of consumption.31 While renewable technologies are gradually displacing fossil fuels from electricity generation — though the jury is out on whether renewables could ever make up for future demand in a growth curve — the grid itself as social form is wired for the accumulation of value (i.e. the former is determined by the latter). The grid’s relation to the energy market, for instance, conceals the origin and source of the electricity, allowing for mixed modes of generation.32 Etienne Balibar claims that “Marx’s materialism has nothing to do with a reference to matter.”33 Following this line, one might say that Marx’s materialism has nothing to do with a reference to energy either, not because the concept and history of energy is not important to Marxism, but because it is essential to separate the sense of energy as eternal return from a dialectical sense of energy as social relation. In Malm’s words: No piece of coal or drop of oil has yet turned itself into fuel, and no humans have yet engaged in systematic large-scale extraction of either to satisfy subsistence needs: fossil fuels necessitate waged or forced labor — the power of some to direct the labor of others — as conditions of their very existence.34 You cannot see energy in the way that you can see a barrel of oil, because energy in the concrete is still abstract, and an energy system fueled by fossil fuels is more abstract still, even though it is determinate of virtually all economic and political capacities today.35 Energy has come to determine the future of capital development in a profound way. This is not to say that, therefore, energy is capital and capital is energy: ubiquitous and allusive, forever leaving its mark but hiding under the cloak of appearances.36 Instead they bear a family resemblance, and not accidentally since capitalism’s global spread since the industrial turn — its very systematicity — has been an effect of its facility with fossil fuels. Energy thus does not merely name the capacity for doing work, as in physics, with a focus on potential, kinetic, thermal, electrical, chemical, nuclear, or other forms of energy, but instead makes vivid the ways any future beyond capital must reconceive both the capacity for work and the flows of value. The critique of energy is the critique of our structural dependence on an environmental relation inherited from the industrial revolution; it is a critique of the facile faith in a technological fix to climate change; it is a critique of the many barbarisms that flow from the contradictions of late fossil capital; and it is a critique of a fossil-fueled hostility to the very notion of social revolution — and hence of the very notion of structural dependence too.37 These essays present no single answer to the twin fields of social anguish that characterize the present: environmental catastrophe and capitalist crisis. Yet, they recognize that these fields cannot be eliminated, reconciled, or transformed without thinking them together. They present starting points for carrying out the work of making energy into a conceptual category for the critique of capital and for figuring the dynamics of historical change crucial to understanding the role of energy in human development. Today, as the annual consumption of fossil fuels lurches upward, emerging economies industrialize and postindustrial economies automate. The vague promise of a clean transition to a renewable economy rings out as capital’s own false consciousness of its material structure. With a projected increase of 45 percent global energy consumption by mid-century in order to maintain current growth rates, we are no doubt on the brink of a major transition.38 Without a materialist critique of energy, the transition will almost certainly exacerbate, rather than alleviate, environmental and economic anguish.

### Role of The Ballot

#### ROB: The judge should vote for the best phenomenologist: the debater who best grounds moral reasoning in lived experience rather than abstract, detached evaluation. Truth-testing treats the resolution as a disembodied proposition, but this divorces ethics from experience and collapses into relativism. Only phenomenological engagement with moral life can provide justified obligations, debate must center on who best experiences the resolution, not who best proves it. You can evaluate offense practically by determining the validity of our phenomenological explanations of the affirmative on the flow. Theory shells are a question of fairness which is contingent and evaluated through our discrete human subjectivity which means our ROB is the highest layer.

Harmon 2016 - Justin Harmon, University of Kentucky, 2016 “THE NORMATIVE ARCHITECTURE OF REALITY: TOWARDS AN OBJECT-ORIENTED ETHICS” [https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1010&context=philosophy\_etds] Accessed 4/23/21 SAO

John M. Rist begins his recent book on Platonic ethics with what seems to be a rather startling claim: “In the West we now live in a post-moral society.”47 This claim seems so startling because it could be argued that we now find ourselves in the thick of moral deliberation, in a place and time rendered placeless and timeless as a result of global technology, whose reach and frameless saturation of everyday life repeatedly generate and regenerate ethical questions. Efforts to respond to these questions are formulized and, for this reason, characterized by repetition—but by a ghostly repetition whose source either remains covered over by conceptual dogmatisms or denied altogether. To deny that there is a real (i.e., not the product of human artifice) source by appeal to which moral questions can be answered is to tacitly accept that moral reasoning is pragmatic and instrumental, that moral problems as such arise only because we (humans) are the sort of beings who have ends and desires. In other words, the pervasive view in the modern world is one that identifies the ethical with value, the latter term deriving ultimately from valuation.48 What is valued is what is valu-able—not in itself, but as a means to our own preconceived ends. This notion of value as the product of valuation, and of valuation as instrumental reasoning, rests on a metaphysical assumption so deeply entrenched that any attempt to undermine it strikes one as astonishing, naïve, or perhaps both: there is an unbridgeable gap between the realms of fact and value. The material universe is itself entirely value-free. Human beings are the bearers of value. The Sartrean nothingness of which we are constituted is really a space for valuation, an indeterminate gap in which fleeting norms take shape and dissolve along with our projects. A third millennium Persian vase on display at the Metropolitan Museum of Art is described as “fragile” only because there are human subjects who value its present form. Without the axiological logos of human subjectivity there is but inscrutable squirming “under the huge abstract boulder of the meaningless blue sky.”49 This dissertation is a challenge to this subjectivist view and to the inveterate “fact-value distinction.” It is thus an attempt to locate the source of normativity in a reality whose basic structure is ontologically indifferent to human designs and goals. Rist’s claim is not that the West has self-consciously descended into moral nihilism. This would be absurd given, for example, the relative prominence of “applied theory” in college ethics courses and public policy debates alike. One feels required to take up some definite position with respect to the “issues” of gun control, abortion, secret drone strikes, Internet censorship, and LGBT rights. Problems are prepackaged, fixed, clearly demarcated, and formulaic. To take up a position one is compelled, to be sure, to supply reasons in support of it, but these reasons are themselves prepackaged, fixed, clearly demarcated, and formulized. What Rist is getting at, rather, is the systemic failure to entertain what Christine Korsgaard calls the “normative question,” i.e. “what justifies the claims that morality makes on us?”50 As a result of this failure, ethical discourse, Rist observes, tends to be free-floating and arbitrary from the point of view of justification. If I support Obama’s aggressive drone program it is because I hold to a particular constellation of values through whose conceptual lens it makes sense to “neutralize” faceless and abstract threats. If you disagree, I might be inclined to think it is because you choose not to subscribe to the value-constellation at issue, which itself, from my perspective, implies something suspect about your “moral character.” My suspicions may be mitigated, however, insofar as you embrace—more or less robustly— some set of values, however strongly I object to it in light of “my own” values. Notice that this cursory attempt to explain moral conviction says nothing at all about whether the latter is normatively justified in accordance with some standard or principle independent of the contingent social milieu of values in which one finds oneself, or in which one constructs his or her “moral personality.” Since it is simply taken for granted that the notion of an externally binding ground for moral decision-making is primitive and naïve,51 one is satisfied to frame ethical discourse purely in terms of moral and social psychology. Every attempt to answer the “normative question” invariably mobilizes some feature of discrete human subjectivity (e.g., sentiment, desire, reason, soul, etc.) without which such an answer must be seen as unintelligible. In this chapter I tell a story about what I call the historical relativization of the ethical. One of the distinguishing aspects of modernity52 is that moral questions and concerns have been indissolubly relativized to the human subject. It is now commonplace to lament the thoughtless allegiance of the young to cultural and (god forbid) individual relativism. My claim is much stronger than this. All standard views in ethical theory—from utilitarianism to Kantianism—are in fondo a (different) kind of “relativism,” insofar as they presuppose some more or less generic aspect of subjectivity to which the whole proposed system of morals is relative. As we shall see, the case of Kant is an interesting one. His deontological ethics represents at one and the same time the apotheosis of the subjective relativization at issue and, in an important sense, the most forceful strategy for overcoming the same.

## Student Loans Tech Phil Aff Case

### Relativism

#### Moral relativism is true. Each individual has their own conception of morality born from their cultural experiences and social location. I may believe that it is moral to steal, but you may disagree. Because moral obligations are not universal but based on individual account of actions, a framework needs to be established in order to hold people accountable for their actions. To evaluate if an individual has a moral obligation, we must look at the rules we’ve agreed upon as a society that govern behavior and expectations in a specific role, as that is the only verifiable metric to determine if someone is acting morally given the difference in moral opinions. Thus, good actions are those consistent with contractarianism, or the principle that individuals and governments have a moral obligation to act in consistency with their agreed upon roles.

### Contracts

#### Prefer this framework for decision making for 5 reasons

#### [1] Self-interest: As individuals, we each have our own idea of what is ethical that is often clouded by what is personally beneficial to us. The solution to this dilemma is ensuring that individuals follow their agreed upon ethical system because it guarantees that individuals cannot pick and choose when they want to follow their own idea of what is good based on what is best for them

#### [2] Accountability: Contracts are the only mechanism for individuals to make ethical rules an absolute certainty between individuals such that we can verify all parties understood what was morally right and thus can be held to the correct actions. Absent a contract, individuals could always argue about what was the correct action to take, but a contract ends the debate

#### [3] Cultural respect: Our framework encompasses all other ethical systems. Recognizing a singular ethic fails to account for the complexity of moral problems and genuine moral disagreement. My framework solves since we can recognize multiple legitimate values while allowing individuals to exclude ones that are bad.

#### [4] Actor specificity: States are not physical actors, but derive authority from contracts that allow them to constrain action. That means in the particular context of government action contracts are more important that individual imperatives like survival

#### [5] Oppression: Nobody would consent to their own oppression, so our framework avoids intuitively atrocious actions like racial discrimination, genocide, and torture.

#### [6] Topic Spec: This is a resolution about the ethicality of a contract so our framework gets to the root of the question.

### Procedures First

#### And, Procedures come first. The conditions of contract formation are prior question to the ethicality of a contract itself. Coercion is a side constraint on contract formation. For example, if someone holds a gun to your head nobody would think you are bound by the terms of a contact you agreed to under duress. Consent is a constitutive feature of contract formation, in order to evaluate the ethicality of a contract we have to first look at the structure the power imbalance between the parties.

### Intrinsic Features First

#### We determine power imbalance based on looking at intrinsic features of the contract formation process, not empiric circumstances. Using consequences in ethical deliberations fail, 7 warrants.

#### [1] Infinitely Cascading Consequences: It’s impossible to determine when the consequences of an action have ended so we can never calculate ethicality

#### [2] Act-omission distinction: There are an infinite number of things you aren’t doing at any given time. Consequentialism holds you responsible for those actions even though they are external to your intentions which removes any reason to be moral because people cannot control what they are being punished for

#### [3] Post Hoc Analysis: Since it requires evaluating end-states we can’t know whether the action was good until after it was taken which fails to guide action

#### [4] Probability: We know that student loans are a racially targeted structure, that means voting aff guarantees the removal of a racist structure. Any future harms are speculative at best.

#### [5] Oppression Olympics: Evaluating consequences requires comparing the oppression experienced by various groups. If we win that a structure is intrinsically racist we shouldn’t be forced to devalue the oppression that other people experience by comparing it to future oppression.

#### [6] Intrinsic Wrongness: Their interpretation would force debaters to defend that slavery and genocide are morally obligatory if they prevented extinction. This encourages students to practice dehumanization techniques that spill out of debate.

#### [7] Political consequences are empirically impossible to predict.

**Menand 5 - Louis Menand, Professor at Harvard University, The New Yorker 2005** “Everybody’s An Expert” [http://www.newyorker.com/magazine/2005/12/05/everybodys-an-expert] SS recut SAO 12/3/23

“Expert Political Judgment” is not a work of media criticism. Tetlock is a psychologist—he teaches at Berkeley—and his conclusions are based on a long-term study that he began twenty years ago. He picked two hundred and eighty-four people who made their living “commenting or offering advice on political and economic trends,” and he started asking them to assess the probability that various things would or would not come to pass, both in the areas of the world in which they specialized and in areas about which they were not expert. Would there be a nonviolent end to apartheid in South Africa? Would Gorbachev be ousted in a coup? Would the United States go to war in the Persian Gulf? Would Canada disintegrate? (Many experts believed that it would, on the ground that Quebec would succeed in seceding.) And so on. By the end of the study, in 2003, the experts had made 82,361 forecasts. Tetlock also asked questions designed to determine how they reached their judgments, how they reacted when their predictions proved to be wrong, how they evaluated new information that did not support their views, and how they assessed the probability that rival theories and predictions were accurate. Tetlock got a statistical handle on his task by putting most of the forecasting questions into a “three possible futures” form. The respondents were asked to rate the probability of three alternative outcomes: the persistence of the status quo, more of something (political freedom, [e.g.] economic growth), or less of something (repression, [e.g.] recession). And he measured his experts on two dimensions: how good they were at guessing probabilities (did all the things they said had an x per cent chance of happening happen x per cent of the time?), and how accurate they were at predicting specific outcomes. The results were unimpressive. On the first scale, the experts performed worse than they would have if they had simply assigned an equal probability to all three outcomes—if they had given each possible future a thirty-three-per-cent chance of occurring. Human beings who spend their lives studying the state of the world, in other words, are poorer forecasters than dart-throwing monkeys, who would have distributed their picks evenly over the three choices.

### TJFs

#### Our Framework is also the most theoretically legitimate in debates.

#### [1] Topicality: No temporal modifier on the resolution means the action of the resolution has to always be true or false regardless of current empiric circumstances

#### [2] Small Schools: Debating about intrinsic features of actions reduces the prep burden on a topic and prevents massive prep groups and teams from overwhelming small teams with evidence

#### [3] Judge Intervention: Determining the likelihood of a consequences requires judgment calls by the judge that require their social political biases. Determining intrinsic features is objective.

### Offense

#### Federal Student Loans are procedurally invalid contracts. 5 warrants

#### [1] Because the need for student loans arise out of desperation individuals are structurally coerced into taking them on in order to access a necessary service

#### [2] Being in debt is coercive. When you owe someone something they have leverage over your and can manipulate you into doing things you would otherwise not agree to.

#### [3] Contracts require an external enforcement agent to ensure that the contract is structurally valid. Since the federal government is the sovereign, they are both a party to the contract and the enforcer which is structurally coercive due to the power imbalance. There is no external agent to hold the government accountable.

#### [4] Student loans prevents you from forming other ethical contracts. You can’t invest your money if you owe it to the government

#### [5] The social contract requires the government to provide basic services like education in exchange for taxes, student loans double charge the borrower and violate the governments end of the social contract.

## ICC Lay Aff Case

#### The International Criminal Court is the world’s leading tribunal for prosecuting war crimes and human rights violations. Because we believe that only War Criminals are afraid of the law, we are proud to affirm the resolution: Resolved: The United States should accede to the Rome Statute of the International Criminal Court.

#### Contention One is War Crimes

#### Between the end of World War II and 2001, there were 248 armed conflicts in 153 regions across the world, among which 201 were initiated by the US. [According to Jounralist Bradley Blankenship](https://www.globaltimes.cn/page/202305/1291437.shtml) From Vietnam to Iraq, U.S. forces have been responsible for indiscriminate bombings, torture, and civilian massacres. These actions fuel anti-American sentiment and create environments where extremism thrives. The aftermath of U.S. intervention in Afghanistan, for example, left the country in economic collapse, pushing many desperate individuals toward radicalization. Fortunately, joining the ICC would force U.S. military leaders to operate under greater accountability. [Research by Benjamin Appel in the Journal of Conflict](https://www.jstor.org/stable/pdf/48597287.pdf?refreqid=fastly-default%3Aec7ed44ea5801fe79632080e43b7822c&ab_segments=&initiator=&acceptTC=1) resolution finds that states under ICC jurisdiction commit significantly fewer human rights violations, *even without actual prosecution*. The threat of prosecution alone deters military abuses, ensuring that commanders prioritize lawful engagement over reckless destruction. [According to Vladimir Voronkov, Under-Secretary-General of the Office of Counter-Terrorism at the United Nations](https://press.un.org/en/2023/sc15396.doc.htm), unchecked war crimes provide terrorist groups with powerful propaganda tools. Groups like ISIS and Al-Qaeda thrive on narratives of Western oppression, using civilian casualties as recruitment material. When U.S. forces operate with impunity, they fuel resentment that drives terrorist recruitment worldwide. ICC oversight would curb these abuses, weakening terrorist narratives and undermining their ability to attract new members. The stakes are existential. [According to Kallenborn & Ackerman in the European Journal of Risk Regulation](https://www.cambridge.org/core/journals/european-journal-of-risk-regulation/article/existential-terrorism-can-terrorists-destroy-humanity/5A3724049B1985D8762AACC4DDBB8C0C) Terrorist organizations are increasingly capable of mass destruction, with experts warning of scenarios where extremist groups access nuclear, biological, or AI-driven weapons. By joining the ICC, the U.S. can break the cycle of war crimes and terrorism, strengthening global stability and ensuring a safer future.

#### Contention Two is Diplomacy

#### The United States’ global reputation is in decline, largely due to perceived hypocrisy in its foreign policy. According to [Award Winning Journalist James Dorsey](https://www.fairobserver.com/world-news/us-news/the-us-lacks-credibility-but-all-is-not-lost/) in 2023, the U.S. claims to champion human rights and international law but often fails to uphold these values. This credibility gap weakens U.S. influence, particularly in the Global South, where nations increasingly turn to rivals like China. If the U.S. wants to maintain leadership in the international order, it must align its actions with its professed ideals. Joining the ICC is a concrete step toward restoring U.S. credibility. The ICC is a cornerstone of the rules-based international system. Former deputy legal advisor on the White House National Security Council [Yevgeny Vindman](https://foreignpolicy.com/2023/04/11/russia-putin-ukraine-war-icc-united-states-crimes-arrest-warrant/) argues, the U.S. supports the ICC when it suits its interests, like applauding the arrest warrant for Vladimir Putin, but refuses to join, reinforcing accusations of double standards. Opponents claim the ICC would infringe on U.S. sovereignty, yet its principle of complementarity ensures it only prosecutes when nations fail to act. Since the U.S. already maintains a robust military justice system, ICC membership poses no real threat to its autonomy. Instead, it would signal to allies and adversaries alike that the U.S. abides by the same laws it expects others to follow. U.S. participation in multilateral institutions is essential for solving existential global crises. UN Secretary-General [António Guterres](https://press.un.org/en/2023/sgsm22078.doc.htm) warns, the world faces escalating conflicts, climate change, and technological threats that transcend borders.The ICC exemplifies how global governance can work when nations commit to collective accountability. Global problems need global solutions. In the AI arms race, for example, with cooperation, international legal frameworks could prevent catastrophic misuse. Just as nuclear treaties once prevented disaster, global cooperation today is vital to managing AI’s risks.

#### By joining the ICC, the U.S. reaffirms its commitment to justice, strengthens international law, and demonstrates that it plays by the same rules it seeks to enforce. Voting affirmative isn’t just about moral leadership, it’s a strategic move to rebuild credibility, unite allies, and secure a stable, rules-based future.