# 1NC v. Annmaria Greenhill R2

## 1

### T

#### Interp – topical affs must fiat an action through the World Trade Organization.

#### Member nations of the WTO make policies as a whole –

WTO ND [(World Trade Organization) “What is the WTO?” https://www.wto.org/english/thewto\_e/whatis\_e/whatis\_e.htm] BC

The WTO is run by its member governments. All major decisions are made by the membership as a whole, either by ministers (who usually meet at least once every two years) or by their ambassadors or delegates (who meet regularly in Geneva).

#### Nation and state are synonymous

Merriam Webster ND [“nation” Merriam Webster, <https://www.merriam-webster.com/dictionary/nation>] BC

Definition of nation

 (Entry 1 of 2)

1a(1): [NATIONALITY sense 5a](https://www.merriam-webster.com/dictionary/nationality)three Slav peoples … forged into a Yugoslavia without really fusing into a Yugoslav nation— Hans Kohn

(2): a politically organized [nationality](https://www.merriam-webster.com/dictionary/nationality)

(3)in the Bible : a non-Jewish nationality why do the nations conspire— Psalms 2:1 (Revised Standard Version)

b: a community of people composed of one or more [nationalities](https://www.merriam-webster.com/dictionary/nationalities) and possessing a more or less defined territory and government Canada is a nation with a written constitution— B. K. Sandwell

c: a territorial division containing a body of people of one or more nationalities and usually characterized by relatively large size and independent status a nation of vast size with a small population— Mary K. Hammond

#### Violation – they don’t – EU member states are distinct from WTO member nations

#### Prefer

#### 1] Ground – justifies affs about any country reducing any IP protection on medicine – only our interp ensures link magnitude by ensuring it is an international reduction for IPP for medicine which is key to generics like the innovation DA, WTO bad, consult the WHO, and the IP NC -- privileges the aff by stretching pre-tournament neg prep too thin and precluding nuanced rigorous testing of aff.

#### 2] Topic ed – WTO patent wavers are the core topic controversy – their aff is just domestic policy passed in European Union Member states. Proven by their second advantage – none of their internal links are about medical trade secrets which proves their interpretation is a cheap way of getting a relations impact about any two countries that does trade – justifies the US-Mexico or China-Japan aff. Outweighs aff flex -- prep is determined by the lit and we only have 2 months to debate the topic and it provides better link magnitude to all your generics because this is the statis point the topic is centered around.

#### 3] Precision - even if all EU member states are in the WTO that doesn’t mean all WTO member nations are in the EU – prefer our interp – we have evidence from the WTO that explains what coordinated action looks like.

#### 4] Paradigm Issues –

#### a] Topicality is Drop the Debater – it’s a fundamental baseline for debate-ability.

#### b] Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### c] No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education, 2] Encourages Baiting since the 1AC will purposely be abusive, and 3] Illogical – you shouldn’t win for not being abusive.

## 2

### CP

#### Text: A nation appointed international panel of scientists including National Academies and corresponding organizations should reduce trade secret protections for medicines by requiring that plaintiffs prove that the acquisition, use, and disclosure of the trade secret did not pertain to revealing misconduct, wrongdoing, or illegal activity, or to protecting the general public interest and manage similar conflicts of interest between intellectual property.

#### International panel of science diplomats can rule over IP---that’s key to science diplomacy.

Hajjar and Greenbaum 18 [David; Dean Emeritus and University Distinguished Professor, and Professor of Biochemistry and Pathology at Weill Cornell Medicine, Cornell University. He is a Fellow of the American Academy of Arts and Sciences, Fellow of the American Association for the Advancement of Sciences, a Jefferson Science Fellow of the National Academies at the U.S. Department of State, and a recent Senior Fellow in Science Policy at the Brookings Institute; Steven; Professor and Chair of the Department of Physics and Astronomy at Hunter College of the City University of New York and a Fellow of the American Physical Society. He was a Jefferson Science Fellow of the National Academies at the U.S. Department of State; “Leveraging Diplomacy for Managing Scientific Challenges,” American Diplomacy; September 18; <https://americandiplomacy.web.unc.edu/2018/09/leveraging-diplomacy-for-managing-scientific-challenges-an-opportunity-to-navigate-the-future-of-science/>] Justin

At the global level, science diplomacy is defined as cooperation among countries in order to solve complex problems through scientific research and education (1). For example, science diplomacy plays an important role in resolving global issues related to the ecosystem (such as clean water, food safety, energy conservation, and preservation of the environment). It also addresses problems related to the healthcare industry. For example, scientists have served at the international level to forge the Middle Eastern Cancer Consortium a decade ago to facilitate better healthcare and improve cancer research in the region. Whether one considers science for diplomacy or diplomacy for science, international science collaborations benefit from allowing science diplomats (broadly defined as science envoys, science attaches, embassy fellows) to help establish positive international relationships between the U.S., Europe, Latin America, Africa or Asia, particularly when proprietary disputes arise (2, 3). These various types of science diplomats already exist; some, like embassy fellows and science envoys, have one-year appointments so their role may be limited, while attaches usually have two or three year appointments that may allow them to be more successful in long, protracted negotiations. In any event, we believe that scientists can play more of a role in advancing international scientific cooperation. A key point addressed here is how to balance security concerns against the need for free exchange of information needed for innovation and growth.

Both the National Science Foundation and the National Institutes of Health are already engaged in supporting American science and strengthening collaborations abroad. Such efforts take advantage of international expertise, facilities, and equipment. Here, we provide a rationale for the use of diplomacy to address scientific challenges. This approach allows some scientists working as diplomats to help manage complex and potentially conflicting situations that arise between scientific communities and their governments. Such issues include managing disputes such as licensing agreements for intellectual property (IP) and providing protection of IP.

International collaborations can not only support but also accelerate the advancement of science. However, collaborations may carry risk if IP is misappropriated for other purposes. International collaborations should have a basis in strategy and specific goals (for example, drug discovery) in order to justify the use of government and/or corporate funds.

About a decade ago, a group of academics from the University of Manchester in the United Kingdom assembled the “Manchester Manifesto,” subtitled “Who Owns Science” (6). This document addressed the lack of alignment between commercial interests, intellectual rights, and credit to the researcher. In our (and commonly held) view, the groups representing these disparate values could benefit from diplomatic mediation. More recently, it has become increasing apparent that managing China as a science and technology superpower represents another challenge for the U.S. Resolution of issues such as ownership of IP, rights to reagents, or use of skilled laboratory personnel from international collaborations may require the efforts of science diplomats. There are few international offices or “guardians” to protect junior and senior scientists in corporate or academic sectors from misuse of reagents or piracy.

China’s failure to respect IP rights, and the resulting piracy, has drawn much attention. The media have also focused on the failure of watchdog government agencies to detect and manage these unwanted activities. Industrial espionage compromises U.S. interests. Moreover, Chinese and Russian hackers have cyberattacked U.S. technology companies, financial institutions, media groups, and defense contractors. In 2018, industrial spying was even reported in a major medical school in New York City where scientists were alleged to have illegally shared research findings with Chinese companies.

The U.S. has a long history of hiring research personnel from other countries to staff its laboratories and industrial R&D centers. These scientists and engineers have made critical contributions to our nation’s well-being and security. These young Chinese and South Asian graduates of U.S. programs a generation ago now staff our research enterprise. However, recent trends in U.S. graduate school applications in science, technology, engineering and mathematics (STEM) reflect a downturn in foreign applicants, particularly from China. It is becoming increasingly apparent that the number of American-born students seeking STEM degrees is not sufficient to satisfy future demands of our high-tech workforce. While our own educational reforms must be augmented, we cannot ignore the need to continue to recruit overseas talent.

We believe that foreign scientists can continue to make critical discoveries in the U. S. provided that their talent is nurtured, developed, and harnessed for the common good. At the same time, American companies cannot hire foreign scientists if they take the ideas they generate in U.S. laboratories back to their home countries without proper credit or permission. If the advancement of science is to succeed, greater diplomatic cooperation is needed to solve and manage proprietary issues for the benefit of all (5, 6).

So, how does one strike the proper balance between security and growth? Science is a universal social enterprise; international conferences lead to friendships and productive collaborations between nations. Given that the U.S. and Chinese governments recognize the need for international communication and collaboration then surely there should be a mechanism for adjudicating anticipated conflicts. One approach would be for government, industrial, and academic stakeholders to form an international panel of scientists and engineers to manage any conflicts of interest between the need to protect proprietary information crucial to a company’s competitive edge, and the need for students and young faculty members to publish their findings. Smaller scale efforts along these lines have recently given rise to unique global partnerships, such as fellowship support by major pharmaceutical companies, which aim to address these conflicts to the benefit of both parties. An added feature of such arrangements is that they often provide corporate financing for research (9). Can this corporate-academic partnership model be adapted to multinational joint R&D efforts while protecting IP? This question falls squarely within the purview of international science diplomacy, whereby science diplomats can establish rules of conduct governing joint global technology development with proper IP protection.

Despite the highly publicized and legitimate piracy allegations against China, at least some data indicates that the Chinese legal system is responding positively to worldwide pressure to honor foreign IP. A 2016 study by Love, Helmers, and Eberhardt, for example, found that between 2006 and 2011, foreign companies brought over 10 percent of patent infringement cases in China, and won over 70 percent of those cases (10). Today, “win rates” average around 80 percent, and “injunction rates,” around 98 percent (10). As Chinese scientists and engineers increasingly enter the top tier of the innovation space, their growing awareness of their own need for IP protection could be a powerful motivating force for the protection of all IP. As stated earlier, science diplomats could catalyze this progress even further by direct negotiations with those parties involved in the conflicts. An obvious flaw in this optimistic outlook is that scientists in the U.S. wield more influence with their government than scientists in China wield with theirs. And to the extent that the Chinese government could be encouraging IP theft, this must be addressed first by those international companies/firms who want to do business with the Chinese. Chinese investments, as well as tech incubators and targeted acquisitions, can enable access to U.S. technologies for commercial development. Although this conveys a level of risk to the developers, it may provide valuable opportunities for U.S. companies as well. In many respects, the extensive engagement and collaboration in innovation between the U.S. and China, often characterized by open exchanges of ideas, talent, and technologies, can be mutually beneficial in enriching and accelerating innovation in both countries.

In summary, we believe that science diplomats could help address the increasingly complex issues that arise between accelerating scientific and engineering advances, and the need to protect national security and corporate IP. We also propose that this might be accomplished by asking the National Academies to **recommend** academic, corporate, and government scientific leaders to serve on an international scientific advisory board, and for the corresponding organizations in other countries to do the same. Access to the free flow of information promotes new knowledge and innovation. A return to a more restrictive intellectual environment is not only harmful to progress, but also nearly impossible to manage in the current internet age. A good place to start would be to engage the newly appointed head of the White House Office of Science and Technology Policy (the Science Advisor to the President of the United States), and working groups within established organizations. These organizations include the American Association for the Advancement of Science (AAAS) or the National Academies of Science, Engineering and Medicine, and corresponding international organizations. What incentive is there for a busy and successful scientist to serve in such capacity? It is the same altruism that motivates us to accept assignments as journal editors, manuscript reviewers, or funding agency panelists for the advancement of science toward the greater good.

#### Solves every existential threat.

Haynes 18—research associate in the Neurobiology Department at Harvard Medical School (Trevor, “Science Diplomacy: Collaboration in a rapidly changing world,” <http://sitn.hms.harvard.edu/flash/2018/science-diplomacy-collaboration-rapidly-changing-world/>, dml) // Re-Cut Justin

Today’s world is extremely interconnected. Most of us take this fact for granted, but its implications cannot be overstated. The rate at which information, resources, and people are able to move from one part of the world to another continues to accelerate at an alarming rate. Undoubtedly, this development has done society immense good. In the last century, global life expectancy has doubled, the percentage of people living in extreme poverty has dropped by about 60%, and world literacy rates have increased by a similar margin. But while these statistics paint a promising picture of human civilization, human progress rests on a fragile foundation of international cooperation; the challenges presented by an interconnected world are immense. War, natural disasters, and economic collapse now exert their effects globally, creating economic and ecological disasters and mass human migrations on an unprecedented scale. And with the US pulling out of major multilateral agreements on trade, climate change mitigation, and denuclearization, you might wonder if our ability to collaborate across borders productively is really up to the task.

Global challenges require global solutions, and global solutions require collaboration between countries both big and small, rich and poor, authoritative and democratic. There are few human enterprises capable of providing continuity across these differences, and as technological solutions are becoming available to some of our most pressing issues, two in particular will be necessary to getting the job done: science and diplomacy. While science has long been utilized as a means to reach political ends—think of British explorer James Cook’s mapping of unexplored continents or the United States’ Manhattan Project—a more formal integration of scientists into the diplomatic process is being undertaken. This effort, which has led to scientists and academics playing a direct role in foreign policy development and international relations, has given birth of a new branch of diplomacy: science diplomacy.

What is science diplomacy?

As both the term and concept of science diplomacy have only recently gained traction in scientific and diplomatic circles, it’s been given a variety of definitions. But common to them all is the focus on applying scientific expertise to an international effort. The focus of these efforts is to solve international problems collaboratively while balancing economic prosperity, environmental protection, and societal wellbeing. The challenge of reaching this balance in the face of a booming global population cannot be understated, but this new branch of diplomacy is already at work and is producing results. International agreements such as the Paris Climate Agreement and the Iran Nuclear Deal are two famous examples, and science diplomacy is also establishing international collaboration in many other important arenas. While these lesser known efforts may not dominate the headlines, they are quietly tackling the global issues of today and preparing us for those of tomorrow.

Natural disasters don’t respect national boundaries (and neither does the aftermath)

In 2013, the number of refugees displaced by natural disasters—hurricanes, droughts, earthquakes—outnumbered those displaced by war. Current projections estimate as many as 1 billion people may be displaced by natural disasters by the year 2050. That would mean 1 in 9 people on the planet displaced and looking for a home. Compare this to the estimated 12 million refugees displaced by the war in Syria, and a frightening picture begins to form. As natural disasters continue to increase in both their frequency and intensity, solutions for mitigating the risk of total catastrophe will be underpinned by science, technology, and the ability of the international community to collaborate. Many organizations are starting to tackle these problems through the use of science diplomacy. The center for Integrated Research on Disaster Risk (IRDR) is composed of ten national committees—a network of government sponsored research institutions across the world in countries ranging the political and economic scale. These working groups have committed to improving disaster-risk-reduction science and technology while providing guidance to policy makers charged with implementing disaster prevention and mitigation strategies.

IRDR is governed by a committee comprising experienced scientists and natural disaster experts. Its members come from all over the world—the US, China, Uganda, Norway, Mexico, Venezuela, and more. The diversity of this organization starts at the top and is crucial to developing comprehensive risk-reduction strategies. Data and insights from countries with varying areas of expertise are being shared and built upon, facilitating more accurate natural disaster forecasting and better strategies for mitigating their destructive power. And by including representatives from countries of varying political and economic power in its leadership, IRDR ensures that its work will consider the needs of the global community at large, rather than just nations with considerable wealth and political standing.

The results of this type of international collaboration speak for themselves. Although humanity is grappling with more natural disasters than ever before, deaths related to these incidents continue to trend downward. Operating outside of the typical political framework that dominates foreign relations, IRDR provides a model for effective collaboration across the geopolitical spectrum in the face of a major global issue.

Explore or Exploit? Managing international spaces

Over the last few decades the polar ice cap that covers much of the Arctic Ocean has been shrinking. So much so, that during the warm season vast areas of previously solid ice have become open waters, creating opportunities for new trade routes and exposing the Arctic’s enormous reserves of oil and natural gas. Depending on your values, this will sound either like an opportunity for huge economic development of the region or the inevitable exploitation of one of the last untouched natural territories on the planet. And if you live there, like the half a million indigenous people who currently do, how this territory is managed will determine where you can live, how (and if) you can make a living, and what the health of the ecosystems that have supported Arctic life for millennia will look like.

Luckily, such a scenario was predicted decades ago. In 1987, Mikhail Gorbachev, then leader of the then Soviet Union, delivered a speech outlining his aspirations for the arctic to be explored rather than exploited—to radically reduce military presence, create a collaborative multinational research effort, cooperate on matters of environmental security, and open up the Northern Sea Route for trade. This speech laid the foundation for the Arctic Council (Figure 1), which is one of the most successful examples of science diplomacy at work. Composed of the eight Arctic nations, including geopolitical rivals US and Russia, and numerous groups of indigenous peoples, the Arctic Council was established to maintain Gorbachev’s vision for the region while giving the indigenous peoples a seat at the negotiating table. The council’s activities are conducted by six scientific and technology-based working groups who conduct research in the area and provide knowledge and recommendations to the council members. As a result of this research, and allowing scientists to take part in the negotiations, the Arctic council has enacted several legally binding agreements regarding the sustainable development and environmental protection of the Arctic Ocean. These agreements have facilitated cooperation on a number of important issues including search and rescue operations, prevention and containment of maritime oil pollution, and, most recently, enhanced data sharing and scientific research collaborations. Against a backdrop of rapidly deteriorating diplomatic relations, the US and Russia have co-chaired task forces that laid the foundation for these agreements, proving to the world that meaningful results can be achieved through the avenue of science diplomacy, regardless of geopolitics.

Science diplomacy going forward

The technical expertise that characterizes science diplomacy will continue to be in demand across many realms of foreign policy. For example, synthetic biology and gene-editing technology continue to factor into matters regarding agriculture and trade. Also, digital currencies, such as bitcoin, have changed the way economists and businesses are approaching markets. Finally, machine learning and artificial intelligence are being used by governments as a means for population control, giving rise to a new type of governance—digital authoritarianism.

While this expertise will be necessary for managing such issues, building international coalitions can’t be done through a purely scientific and technical lens. Convincing others to cooperate means providing them with a convincing argument to do so, and in terms they understand and find compelling. To achieve this, scientists must be trained to communicate their expertise in a way that moves stakeholders in policy discussions to act. This means appealing to motivations they have been largely taught to put to the side—whether they be political, economic, or emotional in nature—without obscuring the data and insights they have to offer.

For our leaders, policy makers, and diplomats to effectively understand issues underpinned by science and technology, experts in these fields must continue to be integrated into the mechanisms of governance. With scientists in the US running for elections in numbers like never before, we can expect this trend to continue. And in the face of a rising wave of nationalism across the world, it is crucial that we do everything we can to foster collaboration. The future of human civilization depends on it.

## 3

### K

#### Genocidal settlement is a structure, not an event meaning ontological logic of elimination is an everyday manifestation that defines settler identity.

**Rifkin 14**, Mark. Settler common sense: Queerness and everyday colonialism in the American renaissance. U of Minnesota Press, 2014. (Associate Professor of English & WGS at UNC-Greensboro)//Elmer

If nineteenth-century American literary studies tends to focus on the ways Indians enter the narrative frame and the kinds of meanings and associa- tions they bear, recent attempts to theorize settler colonialism have sought to shift attention from its effects on Indigenous subjects to its implications for nonnative political attachments, forms of inhabitance, and modes of being, illuminating and tracking the pervasive operation of settlement as a system. In Settler Colonialism and the Transformation of Anthropology, Patrick Wolfe argues, “Settler colonies were (are) premised on the elimination of native societies. The split tensing reflects a determinate feature of settler colonization. The colonizers come to stay—invasion is a structure not an event” (2).6 He suggests that a “logic of elimination” drives settler governance and sociality, describing “the settler-colonial will” as “a historical force that ultimately derives from the primal drive to expansion that is generally glossed as capitalism” (167), and in “Settler Colonialism and the Elimination of the Native,” he observes that “elimination is an organizing principle of settler-colonial society rather than a one-off (and superceded) occurrence” (388). Rather than being superseded after an initial moment/ period of conquest, colonization persists since “the logic of elimination marks a return whereby the native repressed continues to structure settler- colonial society” (390). In Aileen Moreton-Robinson’s work, whiteness func- tions as the central way of understanding the domination and displacement of Indigenous peoples by nonnatives.7 In “Writing Off Indigenous Sover- eignty,” she argues, “As a regime of power, patriarchal white sovereignty operates ideologically, materially and discursively to reproduce and main- tain its investment in the nation as a white possession” (88), and in “Writ- ing Off Treaties,” she suggests, “At an ontological level the structure of subjective possession occurs through the imposition of one’s will-to-be on the thing which is perceived to lack will, thus it is open to being possessed,” such that “possession . . . forms part of the ontological structure of white subjectivity” (83–84). For Jodi Byrd, the deployment of Indianness as a mobile figure works as the principal mode of U.S. settler colonialism. She observes that “colonization and racialization . . . have often been conflated,” in ways that “tend to be sited along the axis of inclusion/exclusion” and that “misdirect and cloud attention from the underlying structures of settler colonialism” (xxiii, xvii). She argues that settlement works through the translation of indigeneity as Indianness, casting place-based political collec- tivities as (racialized) populations subject to U.S. jurisdiction and manage- ment: “the Indian is left nowhere and everywhere within the ontological premises through which U.S. empire orients, imagines, and critiques itself ”; “ideas of Indians and Indianness have served as the ontological ground through which U.S. settler colonialism enacts itself ” (xix).

#### That results in land exploitation and ecocide – specifically manifests in knowledge institutions making forefronting Settler Colonialism a prior question.

**Paperson 17** la paperson or K. Wayne Yang, June 2017, “A Third University is Possible” (an associate professor of ethnic studies at the University of California, San Diego)//Elmer

Land is the prime concern of settler colonialism, contexts in which the colonizer comes to a “new” place not only to seize and exploit but to stay, making that “new” place his permanent home. Settler colonialism thus complicates the center–periphery model that was classically used to describe colonialism, wherein an imperial center, the “metropole,” dominates distant colonies, the “periphery.” Typically, one thinks of European colonization of Africa, India, the Caribbean, the Pacific Islands, in terms of external colonialism, also called exploitation colonialism, where land and human beings are recast as natural resources for primitive accumulation: coltan, petroleum, diamonds, water, salt, seeds, genetic material, chattel. Theories named as “settler colonial studies” had a resurgence beginning around 2006.[2] However, the analysis of settler colonialism is actually not new, only often ignored within Western critiques of empire.[3] The critical literatures of the colonized have long positioned the violence of settlement as a prime feature in colonial life as well as in global arrangements of power. We can see this in Franz Fanon’s foundational critiques of colonialism. Whereas Fanon’s work is often generalized for its diagnoses of anti/colonial violence and the racialized psychoses of colonization upon colonized and colonizer, Fanon is also talking about settlement as the particular feature of French colonization in Algeria. For Fanon, the violence of French colonization in Algeria arises from settlement as a spatial immediacy of empire: the geospatial collapse of metropole and colony into the same time and place. On the “selfsame land” are spatialized white immunity and racialized violation, non-Native desires for freedom, Black life, and Indigenous relations.[4] Settler colonialism is too often thought of as “what happened” to Indigenous people. This kind of thinking confines the experiences of Indigenous people, their critiques of settler colonialism, their decolonial imaginations, to an unwarranted historicizing parochialism, as if settler colonialism were a past event that “happened to” Native peoples and not generalizable to non-Natives. Actually, settler colonialism is something that “happened for” settlers. Indeed, it is happening for them/us right now. Wa Thiong’o’s question of how instead of why directs us to think of land tenancy laws, debt, and the privatization of land as settler colonial technologies that enable the “eventful” history of plunder and disappearance. Property law is a settler colonial technology. The weapons that enforce it, the knowledge institutions that legitimize it, the financial institutions that operationalize it, are also technologies. Like all technologies, they evolve and spread. Recasting land as property means severing Indigenous peoples from land. This separation, what Hortense Spillers describes as “the loss of Indigenous name/land**”** for Africans-turned-chattel, recasts Black Indigenous people as black bodies for biopolitical disposal: who will be moved where, who will be murdered how, who will be machinery for what, and who will be made property for whom.[5] In the alienation of land from life, alienable rights are produced: the right to own (property), the right to law (protection through legitimated violence), the right to govern (supremacist sovereignty), the right to have rights (humanity). In a word, what is produced is whiteness. Moreover, it is not just human beings who are refigured in the schism. Land and nonhumans become alienable properties, a move that first alienates land from its own sovereign life. Thus we can speak of the various technologies required to create and maintain these separations, these alienations: Black from Indigenous, human from nonhuman, land from life.[6] “How?” is a question you ask if you are concerned with the mechanisms, not just the motives, of colonization. Instead of settler colonialism as an ideology, or as a history, you might consider settler colonialism as a set of technologies —a frame that could help you to forecast colonial next operations and to plot decolonial directions. This chapter proceeds with the following insights. (1) The settler–native– slave triad does not describe identities. The triad—an analytic mainstay of settler colonial studies—digs a pitfall of identity that not only chills collaborations but also implies that the racial will be the solution. (2) Technologies are trafficked. Technologies generate patterns of social relations to land. Technologies mutate, and so do these relationships. Colonial technologies travel. In tracing technologies’ past and future trajectories, we can connect how settler colonial and antiblack technologies circulate in transnational arenas. (3) Land—not just people—is the biopolitical target.[7] The examples are many: fracking, biopiracy, damming of rivers and flooding of valleys, the carcasses of pigs that die from the feed additive ractopamine and are allowable for harvest by the U.S. Food and Drug Administration. The subjugation of land and nonhuman life to deathlike states in order to support “human” life is a “biopolitics” well beyond the Foucauldian conception of biopolitical as governmentality or the neoliberal disciplining of modern, bourgeois, “human” subject. (4) (Y)our task is to theorize in the break, that is, to refuse the master narrative that technology is loyal to the master, that (y)our theory has a Eurocentric origin. Black studies, Indigenous studies, and Othered studies have already made their breaks with Foucault (over biopolitics), with Deleuze and Guatarri (over assemblages and machines), and with Marx (over life and primitive accumulation). (5) Even when they are dangerous, understanding technologies provides us some pathways for decolonizing work. We can identify projects of collaboration on decolonial technologies. Colonizing mechanisms are evolving into new forms, and they might be subverted toward decolonizing operations. The Settler–Native–Slave Triad Does Not Describe Identities One of the main interventions of settler colonial studies has been to insist that the patterning of social relations is shaped by colonialism’s thirst for land and thus is shaped to fit modes of empire. Because colonialism is a perverted affair, our relationships are also warped into complicitous arrangements of violation, trespass, and collusion with its mechanisms. For Fanon, the psychosis of colonialism arises from the patterning of violence into the binary relationship between the immune humanity of the white settler and the impugned humanity of the native. For Fanon, the supremacist “right” to create settler space that is immune from violence, and the “right” to abuse the body of the Native to maintain white immunity, this is the spatial and fleshy immediacy of settler colonialism. Furthermore, the “humanity” of the settler is constructed upon his agency over the land and nature. As Maldonado- Torres explains, “I think, therefore I am” is actually an articulation of “I conquer, therefore I am,” a sense of identity posited upon the harnessing of nature and its “natural” people.[8] This creates a host of post+colonial problems that have come to define modernity. Because the humanity of the settler is predicated on his ability to “write the world,” to make history upon and over the natural world, the colonized is instructed to make her claim to humanity by similarly acting on the world or, more precisely, acting in his. Indeed, for Fanon, it is the perverse ontology of settler becomings—becoming landowner or becoming property, becoming killable or becoming a killer—and the mutual implication of tortured and torturer that mark the psychosis of colonialism. This problem of modernity and colonial psychosis is echoed in Jack Forbes’s writings: Columbus was a wétiko. He was mentally ill or insane, the carrier of a terribly contagious psychological disease, the wétiko psychosis. . . . The wétiko psychosis, and the problems it creates, have inspired many resistance movements and efforts at reform or revolution. Unfortunately, most of these efforts have failed because they have never diagnosed the wétiko.[9] Under Western modernity, becoming “free” means becoming a colonizer, and because of this, “the central contradiction of modernity is freedom.”[10] Critiques of settler colonialism, therefore, do not offer just another “type” of colonialism to add to the literature but a mode of analysis that has repercussions for any diagnosis of coloniality and for understanding the modern conditions of freedom. By modern conditions of freedom, I mean that Western freedom is a product of colonial modernity, and I mean that such freedom comes with conditions, with strings attached, most manifest as terms of unfreedom for nonhumans. As Cindi Mayweather says, “your freedom’s in a bind.”[11]

#### Expansion of medical access is a form of settler colonial biomedical onslaught – humanitarian promotions of health proliferate genocidal assimilation.

**Klausen 13,** Jimmy Casas. "Reservations on hospitality: contact and vulnerability in Kant and indigenous action." Hospitality and World Politics. Palgrave Macmillan, London, 2013. 197-221. (Associate Professor in the Instituto de Relações Internacionais at the Pontifícia Universidade Católica do Rio de Janeiro)//Elmer

On the other hand and by contrast, the governmental reach of public health initiatives that would effect the improvement of isolated indigenous populations’ health accords with Kantian philanthropy – with all the risks of violated freedom and smothered life that entails. Public health advocates would repair the disadvantaged morbidity profile of isolated indigenous groups through a policy of initiating contact supported by the provision of modern biomedical health care services to ameliorate the epidemiological effects of contact. State-initiated contact without attendant health care has proved disastrous. Into the 1970s, FUNAI attempted to make friendly contact with isolated Indians. By relying on hired expert indigenous trackers, government contact expeditions located isolated groups and – demonstrating their interest in seeking commerce – enticed the latter with gifts of machetes and blankets. One FUNAI expedition to contact the Matis in 1978 resulted in high morbidity from pneumonia and other infectious diseases and killed one of every two Matis. 60 To correct such devastating policies, anthropologists Magdalena Hurtado, Kim Hill, Hillard Kaplan and Jane Lancaster have elaborated the following argument: Many anthropologists and indigenous-rights activists believe that uncontacted Indians should be left alone. These people are well-meaning, but they are wrong because they base their position on three incorrect assumptions. First, they assume that the Indians have chosen to remain isolated . . . . Those who oppose contact also assume that the Indians will inevitably be decimated by virgin-soil epidemics . . . . Finally, opponents of contact assume that isolated native groups will survive if not contacted. 61 However, even correcting for the fatal infelicities of past policy-driven, state-initiated contacts such as FUNAI’s, the preponderantly disadvantaged morbidity profile of such virgin-soil populations cannot be reduced by greater hospitality in the form of redoubled and more expert interventionary contacts. Although public health efforts like those advocated by Hurtado et al. might reduce mortality, highly disease-vulnerable persons will still sicken and will do so through means that would pretend to foster life by actively disregarding how the people subject to these external machinations might determine their own needs and value their own health. Isolated indigenes’ biological lives would be simultaneously fostered and risked, while their free personhood would count as nothing morally–culturally. In short, there are serious political costs to be weighed in such an intervention. Because of – and not in spite of – their philanthropy, public health interventions of the type that Hurtado et al. advocate extend the reach of governmentality much more intrusively than land rights policies. Besides deciding on behalf of peoples in regard to the interpretation of their acts of self-quarantine, the advocated public health policies surgically insert apparatuses of biomedicine directly into the contacted peoples’ living being. Such policies thereby displace indigenous norms of health and native cultural strategies of living on with the norms and overall strategy embedded in the culture of scientific and clinical biomedicine. Though the pretence is that such acts demonstrate the hospitality of the wider national or global society, such health policy interventions cannot simply make a presentation for possible society; rather, qua philanthropy they initiate contact, which, because of the high degree of vulnerability of those contacted, must needs lead to the proliferation of contacts. It is not a hospitable policy of fostering life that Hurtado et al. support, not merely possible commerce but an obsessive philanthropy of biomedical life support and literally unavoidable onslaught of commerce, possibly forevermore. Most startlingly, such public health interventions presume as universal a standard of life that could certainly vary while retaining meaning and value. The anthropologist Tess Lea describes this universalising interventionary compulsion in withering words: When you are a helping bureau-professional, the compulsion to do something to fix the problems of target populations – those deemed as suffering from unequal and preventable conditions – exceeds all other impulses . . . . ‘They’ need our greater commitment. The idea that life might be lived differently with value and meaning or that ‘need’ might be conceived differently from the way in which we calculate it through our interventionary lens, becomes impossible to imagine. 62 Hurtado et al. assume that health professionals and policy makers must hospitably confer biomedically acquired immunity on heretofore isolated and now contacted virgin soil populations. Fostering indigenous lives by imposing an alien conception of immunity, they would inhospitably destroy alternate strategies of living on. Seeing through their interventionary lens, Hurtado et al. themselves become arbiters of successful and unsuccessful forms of life: they presume that self-quarantine cannot itself serve as an effective cultural strategy to immunise living bodies. Thus, ironically perhaps, these anthropologists choose biology above culture by seeing each from a standpoint authorised by the culture of biomedicine. From their interventionary lens and against Canguilhem’s admonition above, self-quarantine appears to be a failed strategy for living on because the immunity it would confer is imperfect or incomplete. Likewise, condoning self-isolation is imperfect or incomplete hospitality as against their more perfect interventionary hospitality in the name of life. Authorising themselves to make these judgements, they enact an altogether different collapse of morality into nature than the Kantian collapse I reconstruct above. Whereas Kant’s collapse of minimalism into abstentionism and moral duty into nature’s constraints opens hospitality and therefore strategies for living on, this other collapse binds moralising conceptions of ‘health’ to the biomedically conceived body. Yet if, according to Canguilhem, for humans especially, ‘health is precisely a certain latitude, a certain play in the norms of life and behavior’, 63 then it seems that the ‘health’ that supposedly hospitable, though strictly philanthropic, ‘life’-fostering interventionary contact would impose on the exuberance of self-quarantining indigenous peoples is a sickness unto that other perpetual peace Kant mentions: death.

#### Biomedicine itself is invested in colonial exploitation through testing done on indigenous communities to biopiracy and stealing indigenous knowledge.

**Lift Mode 17** 3-10-2017 "Pharmaceutical Colonialism” <https://medium.com/@liftmode/pharmaceutical-colonialism-3-ways-that-western-medicine-takes-from-indigenous-communities-3a9339b4f24f> (We at Liftmode.com are a team of professionals from a variety of backgrounds, dedicated to the mission of providing the highest quality and highest purity nutritional health supplements on the market. We look specifically for the latest and most promising research in the fields of cognition enhancement, neuroscience and alternative health supplements, and develop commercial strategies to bring these technologies to the marketplace.)//Elmer

Does modern medicine take from rural communities? At first, this seems outrageous. However, on closer inspection, we find three main methods of poaching: stealing indigenous knowledge, ‘biopiracy’, and the sale of pharmaceuticals at exorbitant prices. Another example includes using developing countries and rural populations as test subjects in unethical clinical trials — for example on AIDS patients in South Africa.[1] This article examines three methods that Western medicine takes from rural communities. We also examine the emerging new forms of medicine and how many people are beginning to appreciate the medical knowledge of different cultures around the world. Traditional knowledge and culture is threatened by the expansive natural of the pharmaceutical industry 1. Pharmaceutical colonialism: Stealing Indigenous Knowledge First and foremost, what has been taken from indigenous communities for the last roughly 600 years is traditional knowledge about medicinal plants. It is interesting that the major advancements in Western medicine coincide very closely to escalating global colonialism by Western countries. It’s difficult to estimate the exact percentage of modern drugs that were originally based on traditional plant sources, because of the complex evolution of Western laboratory-made medicine. However, this percentage is known to be very high. In fact, a 2006 paper by Dr. A Gurib-Fakim states: “Natural products and their derivatives represent more than 50% of all the drugs in clinical use in the world. Higher plants contribute no less than 25% of the total.”[2] The extent to which traditional knowledge permeates through Western medicine is too broad to explain fully in a small article like this. We’d need to write an entire book to cover the full content! So, we will just take a look at one example below. How the West takes Indigenous knowledge: Anti-Malaria Drugs Mosquitoes are, by far, the world’s most dangerous animals, spreading a number of diseases including Dengue fever, Zika virus, and malaria. According to the World Health Organization, nearly half of the world’s population is at risk of malaria. In 2015, over 210 million people became infected with malaria, and a staggering 429 000 people died from the blood parasite.[3] To combat the infectious disease, scientists have developed two major classes of anti-malarial drugs. These are both based on indigenous knowledge of plant medicine: Mosquitos kill more people than any other animal every year 1. Quinine Quinine is extracted from the bark of the cinchona tree, native to South America. Contrary to propaganda by the Spanish inquisitors, which is still used in modern medicine today, Westerners did not ‘discover’ the cinchona tree. Indigenous Peruvian cultures had been using the bark of the cinchona tree for hundreds, possibly thousands, of years before the arrival of the colonial forces from the North. They crushed it up and mixed it with water to ‘relieve shivering’ — a major sign of the feverish symptoms of malaria.[4] Unlike traditional Chinese knowledge, which has survived until modern times, the ancient knowledge of South America cultures was almost completely destroyed by colonial forces. This makes tracing the historical use of the cinchona tree more difficult.[5] After the inquisition of most traditional cultures in South America, the cinchona bark was brought back to Western Europe and was hailed as one of the most exciting discoveries of modern medicine. The success of cinchona bark in Europe created a massive industry, initially run by the Spanish, but which was later overtaken by French and English industrialists.[6] It’s important to know that the ‘traditional’ use of cinchona bark in 18th century Europe was in exactly the same method as its original use in indigenous societies: crushing up the barking and mixing it with water. The chemical compound quinine was first extracted from cinchona bark in 1820 by two Frenchmen: Pierre Joseph Pelletier and Joseph Caventou. This allowed purified quinine to replace traditional cinchona extracts.[7] Interestingly, Western scientists have since discovered that cinchona bark actually contains several active components, which function in a synergistic relationship to kill the malaria parasite.[8] In modern times, a number of quinine-based drugs have been developed, with varying success. The issue becomes complex here because, while these drugs were developed by Western scientists using modern technological laboratories, if it hadn’t been for the original indigenous knowledge, these compounds could not have been developed at all. The quinine derivatives include Chloroquine, Pyrimethamine, and Mefloquine. Chloroquine was used as a spray along with DDT in the WHO’s malaria eradication plan (the efficacy and usefulness of this are still under debate: numerous countries that were sprayed with these chemicals soon developed strains of malaria that were resistant to the drugs).[9] 60411828 - workers are fogging for dengue control. mosquito borne diseases of zika virus. Quinine-based drugs were used in sprays to combat malaria around the world 2. Artemisinin Artemisinin is an active compound found in traditional Chinese medicine called Qinghao Su (sweet wormwood). This traditional Chinese medicine has been used to treat fevers for over a thousand years. It is currently still extracted from plant sources, the majority of which are grown in China, Vietnam and East Africa. Once the full-grown plants are harvested, the chemical is extracted, leaving the pure artemisinin at a highly variable market price of between $120 — $1200 per kilogram.[10] It’s interesting that the artemisinin-based drug combinations (ACTs) are the most expensive anti-malarial treatments available. This is despite the fact that it is one of the few malarial medications that are still mostly plant-based. However, Western pharmaceutical companies are now developing synthetic forms of artemisinin. The new forms of artemsinin are genetically engineered and have intellectual property rights attached, potentially bringing in big revenues for the companies involved. The proponents of the synthetic form of artemisinin claim that the synthetic form will be able to be sold for cheaper than the natural form. However, the average import price of natural artemsisin to India over the last ten years was around $370 per kilo — a fair amount cheaper than the price that the pharmaceutical companies are pushing for.[11] Artemisinin farming sustains the livelihoods of an estimated 100’000 farmers. With synthetic derivatives being developed this puts the livelihoods of the farmers and their families at risk of poverty (estimated to be around 3–5 times the number of people as the farmers themselves).[12] The ironic and disturbing thing about the whole situation is that the artemisinin farmers themselves are the ones who are most at risk of contracting malaria. In effect, they stand to not only have their incomes stripped by Western pharmaceutical companies but also to become physically dependent on the products of those very companies. [13] 16118463 - portrait of a burmese woman with thanaka powdered face working in farm Farmers livelihoods are threatened by the use of synthetic chemicals 2. ‘Biopiracy’ — stealing natural resources and plants The idea that modern medicine might be a form of colonialism seems at first to be quite outrageous! However, on closer inspection, it’s quite clear that a few nations continue to play the role of ‘missionary’, helping to save people in the ‘developing world’.[14] In some cases, though, the role of the ‘missionary’ becomes a little less clear. The second way that Western medicine takes from indigenous communities is something called ‘Biopiracy’. This is similar to the method we described above, however, in this case, what is taken is not knowledge but the actual plants and resources themselves. In biopiracy actions, plants and natural resources are stolen entirely from indigenous communities and are then used to develop drugs and medicines in the West. The indigenous communities benefit nothing from the theft of their resources. Medicines developed from stolen materials are often sold back to the very people from whom the original plant-sources were stolen — at exorbitant prices. Examples of medications that face biopiracy charges include: A drug for diabetes developed in the UK from a Libyan plant, Artemisia judaica A medicine for immunosuppression developed by GlaxoSmithKline which is derived from a chemical found in termite hills in Gambia An HIV treatment taken from bacteria found in central Uganda Antibiotic drugs developed from amoebas found in Mauritius and Venezuela Anti-diarrhea vaccines developed from Egyptian bacteria [15] According to Beth Burrows, president of Washington-based Edmond’s Institute: “Times have changed. It is no longer acceptable for the great white explorer to trawl across Africa or South America taking what they want for their own commercial benefit. It is no more than a new form of colonial pillaging. As there are internationally recognized rights for oil, so there should be for indigenous plants and knowledge.”[16] In an ideal world, knowledge and resources would be shared equitably. Both the indigenous cultures and the modern world would benefit from the sharing of knowledge and medicinal plants, which could leave the world a much better place. However, this is not the case in today’s world. More and more, we see evidence of pharmaceutical companies using rural communities as customers and guinea-pigs for medicine that was originally sourced from local knowledge.[17] Traditional medicine is pushed off the market and indigenous knowledge is ‘dumbed down’ through development programs. This forces the majority of the world to have to work through cartel-like pharmaceutical corporations who extract unbelievably large sums of money from people, which we’ll look at below.[18] 21736635 - shanty house in bangkok water canals along the river bank, thailand Those who benefit the least from pharmaceutical colonialism are the ones who need healthcare the most

#### Vote negative to endorse a cartography of refusal

**Day 15** Iyko, Associate Professor of English. Chair, Critical Social Thought. “Being or Nothingness: Indigeneity, Antiblackness, and Settler Colonial Critique.” Source: Critical Ethnic Studies, Vol. 1, No. 2 (Fall 2015), pp. 102-121 //Elmer

And so the potential relations that Wilderson sets up through a critique of sovereignty are at best irrelevant or at worse false in Sexton’s absolute claim that slavery stands alone as the “threshold of the political world.”45 I suggest that this wavering relation/nonrelation of antiblackness and Indigeneity exhibited in Wilderson’s and Sexton’s work reveal the problem in any totalizing approach to the heterogeneous constitution of racial difference in settler colonies. Beyond this inconsistency, the liberal multiculturalist agenda that Wilderson and Sexton project into Indigenous sovereignty willfully evacuates any Indigenous refusal of a colonial politics of recognition. Among other broad strokes, Sexton states, “as a rule, Native Studies reproduces the dominant liberal political narrative of emancipation and enfranchisement.”46 This provides a basis for Wilderson’s assertion that Indigenous sovereignty engages in a liberal politics of state legitimation through recognition because “treaties are forms of articulation” that buttress “the interlocutory life of America as a coherent (albeit genocidal) idea.”47 But such a depoliticized liberal project is frankly incompatible with Indigenous activism and scholarship that emerges from Native studies in North America. The main argument in Glen Sean Coulthard’s book Red Skin, White Masks is to categorically reject “the liberal recognition-based approach to Indigenous selfdetermination.”48 This is not a politics of legitimizing Indigenous nations through state recognition but rather one of refusal, a refusal to be recognized and thus interpellated by the settler colonial nation-state. Drawing on Fanon, Coulthard describes the “necessity on the part of the oppressed to ‘turn away’ from their other-oriented master-dependency, and to instead struggle for freedom on their own terms and in accordance with their own values.”49 It is also difficult to reconcile the depoliticized narrative of “resurgence and recovery” that Wilderson and Sexton attribute to Indigenous sovereignty in the face of Idle No More, the anticapitalist Indigenous sovereignty movement in Canada whose national railway and highway blockades have seriously destabilized the expropriation of natural resources for the global market. These are examples that Coulthard describes as “direct action” rather tjhan negotiation—in other words, antagonism, not conflict resolution: The [blockades] are a crucial act of negation insofar as they seek to impede or block the flow of resources currently being transported to international markets from oil and gas fields, refineries, lumber mills, mining operations, and hydroelectric facilities located on the dispossessed lands of Indigenous nations. These modes of direct action . . . seek to have a negative impact on the economic infrastructure that is core to the colonial accumulation of capital in settler-political economies like Canada’s.50 These tactics are part of what Audra Simpson calls a “cartography of refusal” that “negates the authority of the other’s gaze.”51 It is impossible to frame the blockade movement, which has become the greatest threat to Canada’s resource agenda,52 as a struggle for “enfranchisement.” Idle No More is not in “conflict” with the Canadian nation-state; it is in a struggle against the very premise of settler colonial capitalism that requires the elimination of Indigenous peoples. As Coulthard states unambiguously, “For Indigenous nations to live, capitalism must die.”

## Case

### Adv 1

#### 1] Disease outbreaks will be defeated with quarantines

Szalai 7/26 [(Jennifer Szalai - author for the NYT) “The Extradordinary History (and likely busy future) of quarantine” The New York Times. 7-26-2021]

**Quarantine can be lifesaving**; it can also be dangerous, an exercise of extraordinary power in the name of disease control, a presumption of guilt instead of innocence. In “Until Proven Safe,” a new book about quarantine’s past and future, Geoff Manaugh and Nicola Twilley do an impressively judicious job of explaining exactly why fears of quarantine are understandable and historically justified, while also showing how in coming years “we will almost certainly find ourselves more dependent on quarantine, not less.” Quarantine has to do with risk and uncertainty, and its logic is simple: “There might be something dangerous inside you — something contagious — on the verge of breaking free.” **While medical advances have made some diseases more diagnosable** and less deadly, newfound knowledge can also accentuate the depths of our ignorance. The more we know, the more we know how much we don’t know — not to mention that **modern life, with escalating numbers of people and goods churning** their way **around the world**, has **increased the opportunities for contagion.** Quarantine is distinct from isolation, even if the terms are often used interchangeably. Someone is isolated when they are known to be sick; **someone is quarantined when they might be but we cannot be sure**. Manaugh, an architecture and technology blogger, and Twilley, the co-host of a podcast about the science and history of food, bring an impressively wide range of interests to bear on a subject that involves not only infectious disease but also — in their ambitious yet seamless narration — politics, agriculture, surveillance and even outer space.

#### 2] Quarantines solve climate change – COVID was responsible for the largest drop in emissions ever

**Alexander 20** [(Kurtis, a general assignment reporter for The San Francisco Chronicle, frequently writing about water, wildfire, climate and the American West. His recent work has focused on the impacts of drought, the widening rural-urban divide and state and federal environmental policy. Before joining the Chronicle, Alexander worked as a freelance writer and as a staff reporter for several media organizations, including The Fresno Bee and Bay Area News Group, writing about government, politics and the environment.) "Coronavirus has altered the global warming trajectory. But for how long?" San Francisco Chronicle, 5/20/20, https://www.sfchronicle.com/health/article/Greenhouse-gas-emissions-on-track-for-record-drop-15279312.php] TDI

The disruption caused by the coronavirus has been so profound that it’s altered the trajectory of global warming. Not since World War II — and perhaps never before — have the emissions of heat-trapping gases dropped as much around the planet as they have during the COVID-19 outbreak. The latest and most detailed study yet on the pandemic’s impact on climate pollution, published Tuesday and authored by the research group Global Carbon Project chaired by Stanford University’s Rob Jackson, finds that the Earth will see up to a 7% decrease in carbon dioxide this year. The dip is five times the decline in emissions in 2009, when the recession choked the world’s economy, and double what it was in 1992, after the fall of the Soviet Union. The paper’s findings mirror other reports that have similarly found sharp drops in greenhouse gases recently. The emerging research also is in agreement that the lull will likely be short-lived and, at best, buy time before the most devastating effects of climate change take hold. The lockdown that has halted factories, energy plants and automobiles during the pandemic is already lifting, and without deliberate action, carbon-intense activities are bound to resume. “That’s the danger here,” said Jackson, a professor of earth system science and senior fellow at Stanford Woods Institute for the Environment. “We’ve decreased emissions for the wrong reasons. Will they jump back up starting this fall, or could the virus allow us to rethink transportation and other parts of the economy?” The answer to the question, say Jackson and others, may not be so straightforward. Greenhouse gases could rebound in some areas, and there could be lasting decreases in others. Measuring heat-trapping gas emissions, for which carbon dioxide is a proxy, is not easy to do, especially in real time. The researchers at the Global Carbon Project analyzed daily economic activity in 69 countries from January through April and modeled the carbon pollution that likely resulted, then compared it to last year. The countries included have historically produced almost all of the world’s carbon dioxide. The researchers found that China, the largest polluter, reduced emissions by nearly 24% on some days in mid-February. The United States, the second-largest polluter, cut emissions by nearly 32% for almost two weeks in mid-April. The European Union, including Great Britain, trimmed emissions by about 27% during the first week of April. The dates of peak reductions varied in different parts of the globe because each locked down at a different time. The biggest cumulative drop in carbon dioxide was on April 7 and measured about 17%, according to the study. While a variety of activity explains the declines, fewer people driving was the largest contributor worldwide. Less industrial pollution was also a big contributor. Based on the observed drops in emissions, the researchers estimate that going forward, carbon dioxide will fall between 4% and 7% for the year worldwide, depending on how quickly countries end their lockdowns. Jackson said the amount of the decline can be viewed as both considerable, given that it’s the largest ever seen, and humbling because it’s the minimum needed annually to put the planet on track to meet the Paris climate agreement — enough of a drop to prevent the global temperature from rising 2 degrees Celsius above preindustrial levels. “We would need to do this every year,” he said. The International Energy Agency recently projected an 8% dip in greenhouse gases for the year while the International Monetary Fund came up with an estimate closer to 6%. Both organizations said carbon pollution would likely rise again in 2021. After the decline in emissions in 2009 of about 1.4%, the following year saw an increase of 5.1%. The Global Carbon Project says there’s reason to think that at least some parts of the globe will try to prevent heat-trapping gases from bouncing back. Stimulus programs aimed at developing clean energy and new carbon-friendly ways of living adopted during the pandemic, such as working from home, could help limit emissions. “Cities from Seattle to Milan are keeping roads closed to cars and letting them stay open to bikes and pedestrians even after the shelter-in-place,” Jackson said. “And maybe COVID-19 and stimulus funding will jump-start electric cars.”

#### 3] No extinction from disease

Adalja 16 [Amesh Adalja is an infectious-disease physician at the University of Pittsburgh. Why Hasn't Disease Wiped out the Human Race? June 17, 2016. https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/]

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained.

I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience.

For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived.

Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like.

So what would it take for a disease to wipe out humanity now?

In Michael Crichton’s The Andromeda Strain, the canonical book in the disease-outbreak genre, an alien microbe threatens the human race with extinction, and humanity’s best minds are marshaled to combat the enemy organism. Fortunately, outside of fiction, there’s no reason to expect alien pathogens to wage war on the human race any time soon, and my analysis suggests that any real-life domestic microbe reaching an extinction level of threat probably is just as unlikely.

Any apocalyptic pathogen would need to possess a very special combination of two attributes. First, it would have to be so unfamiliar that no existing therapy or vaccine could be applied to it. Second, it would need to have a high and surreptitious transmissibility before symptoms occur. The first is essential because any microbe from a known class of pathogens would, by definition, have family members that could serve as models for containment and countermeasures. The second would allow the hypothetical disease to spread without being detected by even the most astute clinicians.

The three infectious diseases most likely to be considered extinction-level threats in the world today—influenza, HIV, and Ebola—don’t meet these two requirements. Influenza, for instance, despite its well-established ability to kill on a large scale, its contagiousness, and its unrivaled ability to shift and drift away from our vaccines, is still what I would call a “known unknown.” While there are many mysteries about how new flu strains emerge, from at least the time of Hippocrates, humans have been attuned to its risk. And in the modern era, a full-fledged industry of influenza preparedness exists, with effective vaccine strategies and antiviral therapies.

HIV, which has killed 39 million people over several decades, is similarly limited due to several factors. Most importantly, HIV’s dependency on blood and body fluid for transmission (similar to Ebola) requires intimate human-to-human contact, which limits contagion. Highly potent antiviral therapy allows most people to live normally with the disease, and a substantial group of the population has genetic mutations that render them impervious to infection in the first place. Lastly, simple prevention strategies such as needle exchange for injection drug users and barrier contraceptives—when available—can curtail transmission risk.

Ebola, for many of the same reasons as HIV as well as several others, also falls short of the mark. This is especially due to the fact that it spreads almost exclusively through people with easily recognizable symptoms, plus the taming of its once unfathomable 90 percent mortality rate by simple supportive care.

Beyond those three, every other known disease falls short of what seems required to wipe out humans—which is, of course, why we’re still here. And it’s not that diseases are ineffective. On the contrary, diseases’ failure to knock us out is a testament to just how resilient humans are. Part of our evolutionary heritage is our immune system, one of the most complex on the planet, even without the benefit of vaccines or the helping hand of antimicrobial drugs. This system, when viewed at a species level, can adapt to almost any enemy imaginable. Coupled to genetic variations amongst humans—which open up the possibility for a range of advantages, from imperviousness to infection to a tendency for mild symptoms—this adaptability ensures that almost any infectious disease onslaught will leave a large proportion of the population alive to rebuild, in contrast to the fictional Hollywood versions.

#### 4] Their impact starts at 4%

Cotton-Barratt 17 [Owen Cotton-Barratt, PhD in Pure Mathematics, Oxford, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute, 2/3/2017, Existential Risk: Diplomacy and Governance, https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf]

For most of human history, natural pandemics have posed the greatest risk of mass global fatalities.37 However, there are some reasons to believe that natural pandemics are very unlikely to cause human extinction. Analysis of the International Union for Conservation of Nature (IUCN) red list database has shown that of the 833 recorded plant and animal species extinctions known to have occurred since 1500, less than 4% (31 species) were ascribed to infectious disease.38 None of the mammals and amphibians on this list were globally dispersed, and other factors aside from infectious disease also contributed to their extinction. It therefore seems that our own species, which is very numerous, globally dispersed, and capable of a rational response to problems, is very unlikely to be killed off by a natural pandemic.

One underlying explanation for this is that highly lethal pathogens can kill their hosts before they have a chance to spread, so there is a selective pressure for pathogens not to be highly lethal. Therefore, pathogens are likely to co-evolve with their hosts rather than kill all possible hosts.39

#### 5] Coevolution solves

Farquhar 17 [Sebastian Farquhar, director at Oxford's Global Priorities Project, Owen Cotton-Barratt, a Lecturer in Mathematics at St Hugh’s College, Oxford, John Halstead, Stefan Schubert, Haydn Belfield, Andrew Snyder-Beattie, "Existential Risk Diplomacy and Governance", GLOBAL PRIORITIES PROJECT 2017, https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf]

1.1.3 Engineered pandemics For most of human history, natural pandemics have posed the greatest risk of mass global fatalities.37 However, there are some reasons to believe that natural pandemics are very unlikely to cause human extinction. Analysis of the International Union for Conservation of Nature (IUCN) red list database has shown that of the 833 recorded plant and animal species extinctions known to have occurred since 1500, less than 4% (31 species) were ascribed to infectious disease.38 None of the mammals and amphibians on this list were globally dispersed, and other factors aside from infectious disease also contributed to their extinction. It therefore seems that our own species, which is very numerous, globally dispersed, and capable of a rational response to problems, is very unlikely to be killed off by a natural pandemic. One underlying explanation for this is that highly lethal pathogens can kill their hosts before they have a chance to spread, so there is a selective pressure for pathogens not to be highly lethal. Therefore, pathogens are likely to co-evolve with their hosts rather than kill all possible hosts.39

### Adv 2

#### 1. EU econ collapse inevitable – err neg because they didn’t read uniqueness:

#### a] COVID lockdowns

Bet 8-22 [Martina Bet, 8-22-2020, "EU at risk of collapse? Gisela Stuart unravels Brussels' key to survival ", Express.co.uk, https://www.express.co.uk/news/uk/1325865/eu-news-eurozone-euro-coronavirus-recovery-fund-gisela-stuart-two-tier-spt, Accessed 10-1-2020] HWL recut LHSSN

EU at risk of collapse? Gisela Stuart unravels Brussels' key to survival THE EUROPEAN UNION will have to go through deep restructuring if it wants to survive in the long-term, former Labour MP Gisela Stuart exclusively told Express.co.uk. The eurozone’s economic rebound from the coronavirus pandemic is losing steam after a few months of improvement, according to a survey of business activity. The IHS Markit flash composite purchasing managers’ index for the euro area fell to 51.6 in August, down from 54.9 in July. According to a Reuters poll, even if a reading above the 50 mark indicates that a majority of businesses reported an expansion in activity, the reading undershot the expectations of most economists, who on average had expected activity to plateau. The disappointing data hit the euro in early trading on Friday and called into question the strength of Europe’s third-quarter economic recovery. The recent resurgence of coronavirus infections in many European countries to levels not seen since May has triggered fresh quarantine requirements and localised lockdowns, raising doubts over the sustainability of the recovery. The discouraging data comes a month after EU leaders struck a deal on a huge coronavirus recovery package. The €750billion (£677billionn) coronavirus fund will be used as loans and grants to the countries hit hardest by the virus. The remaining money represents the EU budget for the next seven years. As many wonder whether the measures will ultimately deepen the bloc’s economic integration or cause its demise, in an exclusive interview with Express.co.uk, former Labour MP and prominent Brexiteer Gisela Stuart claimed the package was a necessary step for the future of the bloc.

#### B] Instability and Brexit

Bradley 1-22/20 [Charlie Bradley, 1-22-2020, "End of the EU? How economist predicted bloc ‘may not survive’ after Brexit", Express.co.uk, https://www.express.co.uk/news/uk/1232032/eu-news-economist-eu-may-not-survive-after-Brexit-spt, Accessed 10-1-2020] HWL Recut LHSSN

The worrying assessment of the state of the EU was made by leading American economist, Stephen Roach. The senior fellow at Yale University’s Jackson Institute for Global Affairs claimed in March 2019 that the bloc is “imperfect” and the EU may not survive. Mr Roach argued the 2008 financial crisis, economic turmoil in southern Europe, and now, Brexit is taking a huge toll on the bloc.

#### Growth is unsustainable and innovation doesn’t solve---shifting away from production is key.

Büchs and Koch 17 [Milena Büchs & Max Koch 17. Milena Büchs is Associate Professor in Sustainability, Economics and Low Carbon Transitions at the University of Leeds, UK. Max Koch is Professor of Social Policy at Lund University (School of Social Work), Sweden. 2017. Postgrowth and Wellbeing. Springer International Publishing. CrossRef, doi:10.1007/978-3-319-59903-8.] // Re-Cut Justin

As the previous chapters have shown, economic growth is regarded as a prime policy aim by policy makers and economists because it is thought to be essential for reducing poverty and generating rising living standards and stable levels of employment (Ben-Ami 2010: 19–20). More generally, support for economic growth is usually intertwined with advocating social progress based on scientific rationality and reason and hence with an optimistic view of humans’ ingenuity to solve problems (ibid.: 17, 20, Chap. 5). Growth criticism thus tends to be portrayed as anti-progress and inherently conservative (ibid.: Chap. 8). While it is important to acknowledge and discuss this view, it needs to be emphasised that growth criticism is formulated with long-term human welfare in mind which advocates alternative types of social progress (Barry 1998). This chapter first outlines ecological and social strands of growth critiques and then introduces relevant concepts of and positions within the postgrowth debate. Ecological Critiques of G rowth Generally speaking, two types of growth criticism can be distinguished: the first focuses on limitations of GDP as a measure of economic performance; the second goes beyond this by highlighting the inappropriateness of growth as the ultimate goal of economic activity and its negative implications for environment and society. Since GDP measures the monetary value of all final goods and services in an economy, it excludes the environmental costs generated by production. For instance, as long as there is no cost associated with emitting greenhouse gases , the cost for the environmental and social damage following from this is not reflected in GDP figures. Worse even, GDP increases as a consequence of some types of environmental damage: if deforestation and timber trade increase or if natural disasters or industrial accidents require expenditures for clean-up and reconstruction, GDP figures will rise (Douthwaite 1999: 18; Leipert 1986). Several critics of GDP as a measure of progress have proposed alternative indicators of welfare such as the Genuine Progress Indicator, Green GDPs or other approaches which factor in environmental costs (see Chap. 5 for more details), but they do not necessarily object to economic growth being the primary goal of economic activity (van den Bergh 2011). In contrast, the idea of ecological limits to growth goes beyond the critique of GDP as a measure of economic performance. Instead, it maintains that economic growth should not, and probably cannot, be the main goal of economic activity because it requires increasing resource inputs, some of which are non-renewable, and generates wastes, including greenhouse gases, that disturb various ecosystems, severely threatening human and planetary functioning in the short and long term. 4 CRITIQUES OF GROWTH 41 Resources are regarded as non-renewable if they cannot be naturally replaced at the rate of consumption (Daly and Farley 2011: 75–76). Examples include fossil fuels, earth minerals and metals, and some nuclear materials like uranium (Daly and Farley 2011: 77; Meadows et al. 2004: 87–107). Based on work by Georgescu-Roegen (1971), many ecological economists also assume that non-renewable resources cannot be fully recycled because they become degraded in the process of economic activity. Historically speaking, economic growth is a fairly recent phenomenon (Fig. 2.1). Since its onset in the late seventeenth century in Europe and mid-eighteenth century in the US (Gordon 2012), it has gone hand in hand with an exponentially increasing use of non-renewable resources such as fossil fuels (Fig. 4.1). While we are not yet close to running out of non-renewable resources, over time they will become more difficult and hence more expensive to recover. This idea is captured by the concept of “energy returned on energy invested” (EROEI). In relation to oil for instance, it has been shown that the easily recoverable fields have been targeted first and that therefore greater energy (and hence financial) inputs will be required to produce more oil. Over time, the ratio of energy returned on energy invested will decrease, reducing the financial incentive to invest further in the recovery of these non-renewable resources (Dale et al. 2011; Brandt et al. 2015: 2). Relevant to this is also the debate about peak oil—a concept coined by Shell Oil geologist Marion King Hubbert in the 1950s—the point at which the rate of global conventional oil production reaches its maximum which is expected to take place roughly once half of global oil reserves have been produced. There is still controversy about whether global peak oil will occur, and if so when, as it is difficult to predict, or get reliable data on, the rate at which alternative types of energy will replace oil (if this was to happen fast enough, peak oil might not be reached, if it has not yet occurred), the size of remaining oil reserves and the future efficiency of oil extraction technologies (Chapman 2014). However, it is plausible to assume that oil prices will rise in the long term if conventional oil availability diminishes, while global demand for oil increases with continuing economic and population growth. Since economic growth in the second half of the twentieth century required increasing inputs of conventional oil, higher oil prices would have a negative impact on growth unless alternative technologies are developed that can generate equivalent liquid fuels at lower prices (Murphy and Hall 2011). Some scholars have criticised the focus on physical/energy resource limitations as initially highlighted in the “limits to growth” debate (Meadows et al. 1972) and state that instead catastrophic climate change is likely to be a more serious and immanent threat to humanity (Schwartzman 2012). The main arguments here are first that much uncertainty remains about the potential and timing of peak oil, future availability of other fossil fuels and development of alternative low energy resources, while the impacts of climate change are already immanent and may accelerate within the very near future. Second, even if peaks in fossil fuel production occurred in the near future, remaining resources could still be exploited to their maximum. However, this would be devastating from a climate change perspective as, according to the latest IPCC scenarios, greenhouse gas emissions need to turn net-zero by the second half of this century for there to be a good chance to limit global warming to 2° Celsius (and ideally, below that) (Anderson and Peters 2016). It is telling that some of the more recent debates about ecological limits to growth put much more emphasis on environmental impacts of growth, rather than on peak oil or other resource limitations (Dietz and O’Neill 2013). Differently put, limits of sinks, especially to absorb greenhouse gases, and to the regeneration of vital ecosystems are now attracting greater concern, compared to limits of resources. Growing economic production generates increasing pressures on the environment due to pollution of air, water and soil, the destruction of natural habitats and landscapes, for instance, through deforestation and the extraction of natural resources. Therefore, growth often also threatens the regeneration of renewable resources such as healthy soil, freshwater and forests, as well as the functioning of vital ecosystems and ecosystems services such as the purification of air and water, water absorption and storage and the related mitigation of droughts and floods, decomposition and detoxification and absorption of wastes, pollination and pest control (Meadows et al. 2004: 83–84). Recent research on planetary boundaries has started to identify thresholds of environmental pollution or disturbance of a range of ecosystems services beyond which the functioning of human life on earth will be put at risk. Rockström and colleagues have identified nine such “planetary boundaries”—“climate change; rate of biodiversity loss (terrestrial and marine); interference with the nitrogen and phosphorus cycles; stratospheric ozone depletion; ocean acidification; global freshwater use; change in land use; chemical pollution; and atmospheric aerosol loading” (Rockström et al. 2009: 472). They also present evidence according to which three of these boundaries—climate change, rate of biodiversity loss and the nitrogen cycle—have already reached their limits (Rockström et al. 2009). Of those three thresholds, climate change has received most attention. The 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2014) concluded that global temperatures have risen by an average of 0.85° since the 1880s (while local temperature increases can be much higher than that) and that the concentration of greenhouse gases in the atmosphere has reached unprecedented levels over the last 800,000 years—that of CO2 has now reached 405.6 parts per million (NASA, January 2017, Fig. 4.2), far surpassing the level of 350 ppm which is considered safe by many scientists (Rockström et al. 2009). The IPCC report also maintained that humans very likely contributed to at least 50% of global warming that occurred since the 1950s (IPCC 2014: 5). A range of climate change impacts can already be observed, including a 26% increase of ocean acidification since industrialisation; shrinking of glaciers, Greenland and Antarctic ice sheets, as well as arctic sea ice; and the rise of sea levels of 19 cm since 1901. This is projected to increase by an additional 82 cm by the end of this century at current levels of greenhouse gas emissions (ibid.: 13). Climate change impacts are already felt with increased occurrences of heat waves, heavy rain fall, increased risk of flooding and impacts on food and water security in a number of regions around the world. It is projected that with a rise of 2° of global temperatures, 280 million people worldwide (with greatest numbers in China, India and Bangladesh) would be affected by sea level rise, escalating to a projected 627 million people under a 4° scenario (Strauss et al. 2015: 10). At the 21st Conference of Parties of the United Nations Framework Convention on Climate Change in Paris in 2015, representatives agreed that action should be taken to limit rise of global temperatures to 2° and Fig. 4.2 Concentration of CO2 in the atmosphere. Source NASA, available from https://climate.nasa.gov/vital-signs/carbon-dioxide/. The CO2 levels have been reconstructed from measures of trapped air in polar cap ice cores 4 CRITIQUES OF GROWTH 45 to “pursue efforts” to limit it to 1.5°. This has been adopted by 196 countries, but immense efforts and very radical reductions of greenhouse gas emissions will be required to comply with the agreement. Even if net greenhouse gas emissions were reduced to zero, surface temperatures would remain constant at their increased levels for hundreds of years to come and climate change impacts such as ocean acidification and rising sea levels would continue for hundreds or even thousands of years once global temperatures are stabilised; moreover, a range of climate change impacts are deemed irreversible (IPCC 2014: 16). One controversial question in the debate about economic growth and environmental impacts has been whether growth can be decoupled from the damage it causes. Important to this debate is the theory of the Environmental Kuznets Curve which applies Simon Kuznets’ hypothesised inverted u-shaped relationship between economic development and income inequality to the relationship between economic development and environmental degradation. According to this theory, environmental degradation is low in the early phases of economic development, then rises with increasing development up to a certain point, beyond which it falls again with advancing development because more resources can be invested to render production and consumption more efficient and less polluting. Therefore, this theory suggests that it is possible to decouple economic growth (measured in GDP) from its environmental implications. The counter-argument to this theory is that it does not take into account the difference between relative and absolute decoupling. Relative decoupling refers to the environmental impacts generated over time per unit of economic output, for instance CO2 emissions per million of US$. In contrast, absolute decoupling would examine aggregate environmental impact, compared to total economic output over time. Here it has been argued that while relative decoupling may be possible as the environmental impact per unit of economic output decreases over time due to efficiency gains, absolute decoupling is much harder to achieve while growth continues. Indeed, there is no evidence for absolute decoupling as total environmental impacts, for instance total global CO2 emissions, are still rising with rising global GDP (Jackson 2011: 67–86). This is partly due to rebound effects which we discussed in Chap. 2: rising consumption because the increase in efficiency has made it cheaper to produce/consume (Jackson 2011: 67–86; see also Czech 2013: Chap. 8 criticising “green growth”). Furthermore, if decoupling is examined at the country level, one would need to take consumptionbased resource use/emissions into account rather than productionbased impacts. Substantial environmental impacts related to everything that is consumed in rich countries occur in developing countries from which goods are imported. A focus on production-based environmental impacts would hence be misleading as it ignores the [and] environmental impacts that relate to a country’s living standards and that occur outside of that country. Social Critiques of Growth Economic growth has not only been criticised from an ecological perspective, but also from an individual and social wellbeing point of view. Here, we can again distinguish a critique of GDP as a measure of wellbeing and a wider critique which highlights potential negative consequences of economic growth for human wellbeing. Several scholars have argued that GDP is an inadequate measure of prosperity or wellbeing because it only includes market transactions and ignores activities of the informal economy in households and the volunteering sector which make an important contribution to individual and social wellbeing (Stiglitz et al. 2011; van den Bergh 2009; Jackson 2011). It also excludes the contribution of certain government services that are provided for free (Douthwaite 1999: 14; Stiglitz et al. 2011: 23), and the roles of capital stocks and of leisure in generating welfare (Costanza et al. 2015: 137). Furthermore, all market transactions make a positive contribution to GDP, regardless of whether expenditures increase or decrease welfare. Similar to the way in which environmental costs of growth are either excluded from GDP or even increase it, expenditures that arise from road accidents, divorces, crime, etc., contribute positively to GDP (ibid.: 133). The focus on market transactions also means that an increasing marketisation (or “commodification”) of an economy will be reflected in a rise of GDP, which may or may not be related to actual “welfare” outcomes (Stiglitz et al. 2011: 49). It also implies that GDP is an insufficient cross-national comparator for the quality of life, as it does not take into account the different sizes of the informal economy across countries (ibid.: 15). Furthermore, GDP does not indicate how income and consumption are distributed in society (Stiglitz et al. 2011: 44). This implies that a rise of GDP can be consistent with a rise of inequality of income and wealth. 4 CRITIQUES OF GROWTH 47 However, if greater inequality has negative impacts on social wellbeing (Wilkinson and Pickett 2009), this would be masked by rising GDP figures (Douthwaite 1999: 17). An even more fundamental criticism of GDP as a measure of wellbeing is that it focuses on the accumulation of money or wealth and thus on the material aspects of wellbeing. Such a narrow conception of the goals of economic activity and wellbeing has been criticised early on in the history of economic thought, e.g. by Aristotle’s distinction between oikonomia and chrematistics. The latter refers to the accumulation of wealth and was regarded by him as an “unnatural” activity which did not contribute to the generation of use value and wellbeing (Cruz et al. 2009: 2021). The argument that wider conceptions of wellbeing and prosperity are required has also become relevant for contemporary critiques of economic growth (Jackson 2011; Paech 2013; Schneider et al. 2010) as we will discuss this in more detail in Chap. 5. Arguments About the Psychological and S ocial Costs of G rowth The broader social critique of economic growth highlights potential “social limits” to or even negative consequences of economic growth for individual and collective wellbeing. The term “social limits to growth” was coined by Fred Hirsch (1976). He argued that the benefits of growth are initially exclusive to small elites and that these benefits disappear as soon as they spread more widely through mass consumption. For instance, only few people can own a Rembrandt painting; holiday destinations are more enjoyable when they are not overrun by hordes of other tourists; there are only few leadership positions, etc. From this perspective, there are “social limits” to the extent to which the benefits of growth can be socially expanded and equally shared. Other scholars have expressed concern about individual and collective social costs of economic growth. First, there is the argument that the need to keep up with ever-rising living standards and new consumer habits, “keeping up with the Joneses”—a lot of which is seen to be driven by advertisement and social pressure rather than real needs, for instance fashionable clothing or gadgets—can generate stress and increase the occurrence of mental disorders (James 2007; Offer 2006; Kasser 2002). 48 M. BÜCHS AND M. KOCH Second, it has been argued that economic growth can imply wider social costs. For instance, with its emphasis on individual gain, market relations and competition, and the need that it generates for spatial mobility (e.g. for successful participation in education and labour markets), it is feared to undermine moral and social capital and put a strain on family and community relations, potentially even leading to increasing divorce and crime rates (Douthwaite 1999; Daly and Cobb 1989: 50–51; Hirsch 1976). Social costs of technological development and industrialisation also include industrial workplace and traffic accidents and time lost in traffic jams and for commuting (Czech 2013: Chap. 2; Stiglitz et al. 2011: 24). Technological innovation which arises from growth can also act as a factor for job losses and increasing job insecurity (Douthwaite 1999), especially if growth rates are not sufficiently high to compensate gains in productivity. It is often assumed that growth will benefit the many because of assumed “trickle-down” effects which promise to improve the lot of the poor simply because the “cake” of available wealth is growing. While progress has been made in reducing extreme global poverty and inequality (Sala-i-Martin 2006; Rougoor and van Marrewijk 2015), the number of people living in poverty across the globe remains high.1 At the same time, income inequality in a range of countries has been rising and the situation of many of the people living in extreme poverty is not improving which means the fruits of economic growth remain to be unequally distributed (Collier 2007; Piketty and Saez 2014). The post-development debate goes even further than that in arguing that not only may growth not have reached the global poor to the extent that had been predicted by neoclassical economists, but that it can also have negative impacts on indigenous communities in developing countries, especially those who rely on local natural resources for their livelihoods which often suffer exploitation, pollution or even destruction through the inclusion of local economies into global value chains (Rahnema and Bawtree 1997). While the distinction between critiques of growth that focus on its problematic ecological and social consequences is useful for analytic purposes, the two dimensions are of course closely linked. Ecological consequences of growth have the potential to severely impact or even undermine human wellbeing. Local livelihoods are already affected by current climate change impacts such as ocean acidification and its impact on marine organisms, draughts, floods and severe weather events, the 4 CRITIQUES OF GROWTH 49 frequency of which has been rising. Accordingly, it is estimated that crop and fish yields are already diminishing in several regions (Stern 2015; IPCC 2014) and that millions of people are already being displaced and forced to migrate due to climate change and other environmental impacts (Black et al. 2011). While the overall long-term impacts of climate change and the surpassing of other planetary boundaries are difficult to predict, they clearly have the potential to substantially undermine human wellbeing. Since greenhouse gas emissions are driven by economic growth, the development of alternative economic models that do not depend on growth is urgent since continued growth “threatens to alter the ability of the Earth to support life” (Daly and Farley 2011: 12).

#### Climate change destroys the world.

Specktor 19 [Brandon; writes about the science of everyday life for Live Science, and previously for Reader's Digest magazine, where he served as an editor for five years; "Human Civilization Will Crumble by 2050 If We Don't Stop Climate Change Now, New Paper Claims," livescience, 6/4/19; <https://www.livescience.com/65633-climate-change-dooms-humans-by-2050.html>] Justin

The current climate crisis, they say, is larger and more complex than any humans have ever dealt with before. General climate models — like the one that the [United Nations' Panel on Climate Change](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."

#### Transition is possible---corona produces unique momentum.

Schiller-Merkens 20 [Senior Research Associate at the Faculty of Management and Economics at Witten/Herdecke University, Germany (Simone, MPIfG Discussion Paper 20/11 Scaling Up Alternatives to Capitalism A Social Movement Approach to Alternative Organizing (in) the Economy  Max Planck Institute for the Study of Societies] // Re-Cut Justin

Signs of hope Despite these two major obstacles that will most likely arise in processes of scaling up alternative organizing, there are also signs of hope that an upward scale shift can happen, and that a social transformation toward a democratic, egalitarian and sustainable economy will not remain an utopian dream but the “real utopia” that Wright (2013a) had envisioned. As just mentioned, the formation of new collective identities associated with alternative organizing will certainly allow its further diffusion, thereby increasingly institutionalizing the underlying moral values within the economy. Furthermore, in several capitalist countries, we witness an increasing politicization of the youth, most visibly in the mass protest of the Fridays for Future movement. While this movement does not directly mobilize against capitalism, it addresses issues that are seen as severe outcomes of the current economic system (and it has recently started to also target corporations). Its more confrontational tactics of capitalist critique – as well as the protest actions of other movements – complement the constructive tactics of alternative organizing initiatives as they raise the public interest in and awareness for alternatives, or at least underscore the urgency to act. While not ofering alternatives themselves, protest movements produce important cultural work on which prefgurative initiatives can build in their own activism for alternative organizing. Furthermore, the current pandemic crisis can provide a chance for a more fundamental transformation of our economy – although in the face of people’s sufering, it appears rather inappropriate to speak of a crisis as a sign of hope. As mentioned above, crises are destabilizing events that can alter the political opportunities for social change (McAdam and Tarrow 2019; Wright 2019). We currently see many initiatives that perceive the crisis as such – as a chance for change – and mobilize accordingly through online meetings and debates on, for instance, transformative responses to the crisis, the need for a social transformation of the economy, or responsible capitalism. Many of them point to the role of neoliberal austerity policies in the severeness of the crisis, and also question the rudimentary public engagement when it comes to issues around education, unemployment, and care work. Social scientists also raise their voice and call for a fundamental rethinking of the state’s functions and duties, asking for rediscovering its role for creating value for society.14 And indeed, the public spending and injections into the economy since the Covid-19 pandemic have risen to a scale that has been formerly unthinkable. Even strong supporters of capitalism nowadays favor state interventions. We currently also witness an increase of collective action based on principles of solidarity and mutuality which demonstrates the crucial role of civil society mobilization for coping with deep crises (della Porta 2020). It reflects what already happened in the aftermath of the financial crisis, namely an increase of organizing relationships in alternative ways through direct social action (Bosi and Zamponi 2015; della Porta 2015). While the current collective action mostly develops in the private sphere of neighborhood relations, there are also campaigns in the economic realm that focus on supporting local commerce that sufers from the lockdown. In the long run, these immediate reactions to the crisis can be a basis for reforming economic relations around ideas of local production and consumption, and therefore an opportunity for prefgurative organizations and communities to raise awareness for such ideas and practices. However, it remains to be seen whether these troubled times will provide the window of opportunity for a greater social transformation. At least, the people now perceive the future as more uncertain than before, and this has already made state actors to also listen to the alternative claims and ideas of actors who challenge the capitalist system or, more moderately, call for far-reaching socialist interventions into the economy. Whether this political opportunity will lead into a greater social change toward a more just economy will depend on the potential of the alternative organizing initiatives to mobilize a broader movement and to efectively counter any countermobilization by opposing actors in the economy.

#### Growth-oriented AI ensures extinction---degrowth solves.

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The challenges of sustainability and of superintelligence are not independent. The changing 84 fluxes of energy, matter, and information can be interpreted as different faces of a general acceleration2 85 . More directly, it is argued below that superintelligence would deeply affect 86 production technologies and also economic decisions, and could in turn be affected by the 87 socioeconomic and ecological context in which it develops. Along the lines of Pueyo (2014, p. 88 3454), this paper presents an approach that integrates these topics. It employs insights from a 89 variety of sources, such as ecological theory and several schools of economic theory. 90 The next section presents a thought experiment, in which superintelligence emerges after the 91 technical aspects of goal alignment have been resolved, and this occurs specifically in a neoliberal 92 scenario. Neoliberalism is a major force shaping current policies on a global level, which urges 93 governments to assume as their main role the creation and support of capitalist markets, and to 94 avoid interfering in their functioning (Mirowski, 2009). Neoliberal policies stand in sharp contrast 95 to degrowth views: the first are largely rationalized as a way to enhance efficiency and production 96 (Plehwe, 2009), and represent the maximum expression of capitalist values. 97 The thought experiment illustrates how superintelligence perfectly aligned with capitalist 98 markets could have very undesirable consequences for humanity and the whole biosphere. It also 99 suggests that there is little reason to expect that the wealthiest and most powerful people would be 100 exempt from these consequences, which, as argued below, gives reason for hope. Section 3 raises 101 the possibility of a broad social consensus to respond to this challenge along the lines of degrowth, 102 thus tackling major technological, environmental, and social problems simultaneously. The 103 uncertainty involved in these scenarios is vast, but, if a non-negligible probability is assigned to 104 these two futures, little room is left for either complacency or resignation. 105 106 2. Thought experiment: Superintelligence in a neoliberal scenario 107 108 Neoliberalism is creating a very special breeding ground for superintelligence, because it strives 109 to reduce the role of human agency in collective affairs. The neoliberal pioneer Friedrich Hayek 110 argued that the spontaneous order of markets was preferable over conscious plans, because markets, 111 he thought, have more capacity than humans to process information (Mirowski, 2009). Neoliberal 112 policies are actively transferring decisions to markets (Mirowski, 2009), while firms' automated 113 decision systems become an integral part of the market's information processing machinery 114 (Davenport and Harris, 2005). Neoliberal globalization is locking governments in the role of mere 115 players competing in the global market (Swank, 2016). Furthermore, automated governance is a 116 foundational tenet of neoliberal ideology (Plehwe, 2009, p. 23). 117 In the neoliberal scenario, most technological development can be expected to take place either in the context of firms or in support of firms3 118 . A number of institutionalist (Galbraith, 1985), post119 Keynesian (Lavoie, 2014; and references therein) and evolutionary (Metcalfe, 2008) economists 120 concur that, in capitalist markets, firms tend to maximize their growth rates (this principle is related 121 but not identical to the neoclassical assumption that firms maximize profits; Lavoie, 2014). Growth 122 maximization might be interpreted as expressing the goals of people in key positions, but, from an 123 evolutionary perspective, it is thought to result from a mechanism akin to natural selection 124 (Metcalfe, 2008). The first interpretation is insufficient if we accept that: (1) in big corporations, the 125 managerial bureaucracy is a coherent social-psychological system with motives and preferences of 126 its own (Gordon, 1968, p. 639; for an insider view, see Nace, 2005, pp. 1-10), (2) this system is 127 becoming techno-social-psychological with the progressive incorporation of decision-making 128 algorithms and the increasing opacity of such algorithms (Danaher, 2016), and (3) human mentality 129 and goals are partly shaped by firms themselves (Galbraith, 1985). 130 The type of AI best suited to participate in firms' decisions in this context is described in a 131 recent review in Science: AI researchers aim to construct a synthetic homo economicus, the 132 mythical perfectly rational agent of neoclassical economics. We review progress toward creating 133 this new species of machine, machina economicus (Parkes and Wellman, 2015, p. 267; a more 134 orthodox denomination would be Machina oeconomica). 135 Firm growth is thought to rely critically on retained earnings (Galbraith, 1985; Lavoie, 2014, p. 136 134-141). Therefore, economic selection can be generally expected to favor firms in which these are greater. The aggregate retained earnings4 137 RE of all firms in an economy can be expressed as: 138 RE=FE(R,L,K)-w⋅L-(i+δ)⋅K-g. (1) 139 Bold symbols represent vectors (to indicate multidimensionality). F is an aggregate production 140 function, relying on inputs of various types of natural resources R, labor L and capital K (including intelligent machines), and being affected by environmental factors5 141 E; w are wages, i are returns to 142 capital (dividends, interests) paid to households, δ is depreciation and g are the net taxes paid to 143 governments. 144 Increases in retained earnings face constraints, such as trade-offs among different parameters of 145 Eq. 1. The present thought experiment explores the consequences of economic selection in a 146 scenario in which two sets of constraints are nearly absent: sociopolitical constraints on market 147 dynamics are averted by a neoliberal institutional setting, while technical constraints are overcome 148 by asymptotically advanced technology (with extreme AI allowing for extreme technological 149 development also in other fields). The environmental and the social implications are discussed in 150 turn. Note that this scenario is not defined by some contingent choice of AIs' goals by their 151 programmers: The goals of maximizing each firm's growth and retained earnings are assumed to 152 emerge from the collective dynamics of large sets of entities subject to capitalistic rules of 153 interaction and, therefore, to economic selection.

#### That outweighs.

Turchin and Denkenberger 18 [Alexey Turchin & David Denkenberger 18. Turchin is a researcher at the Science for Life Extension Foundation; Denkenberger is with the Global Catastrophic Risk Institute (GCRI) @ Tennessee State University, Alliance to Feed the Earth in Disasters (ALLFED). 05/03/2018. “Classification of Global Catastrophic Risks Connected with Artificial Intelligence.” AI & SOCIETY, pp. 1–17.] // Re-Cut Justin

According to Yampolskiy and Spellchecker (2016), the probability and seriousness of AI failures will increase with time. We estimate that they will reach their peak between the appearance of the first self-improving AI and the moment that an AI or group of AIs reach global power, and will later diminish, as late-stage AI halting seems to be a low-probability event. AI is an extremely powerful and completely unpredictable technology, millions of times more powerful than nuclear weapons. Its existence could create multiple individual global risks, most of which we can not currently imagine. We present several dozen separate global risk scenarios connected with AI in this article, but it is likely that some of the most serious are not included. The sheer number of possible failure modes suggests that there are more to come.