# 1NC

### 1

#### CP: The TRIPs Council should vote to reduce intellectual property protections for [PLAN], amending TRIPs to mandate the [PLAN]

#### The United States should:

#### --Publicly rescind support for the WTO waiver

#### -- Veto this motion and refuse to comply

#### The remaining member nations should initiate proceedings against the United States through the World Trade Organization Dispute Settlement Body which ought to find against the United States. The United States ought to comply with this ruling.

#### Counterplan competes ---

#### 1] The plan has the “member nations” act individually, while the counterplan is the WTO through the Council and eventually the DSB.

**Collins Dictionary n.d.** “member nations” RJP, DebateDrills https://www.collinsdictionary.com/us/dictionary/english/member-nations

member nations

The [United](https://www.collinsdictionary.com/us/dictionary/english/unite) [Nations](https://www.collinsdictionary.com/us/dictionary/english/nation) is an [international](https://www.collinsdictionary.com/us/dictionary/english/international) organization [comprised](https://www.collinsdictionary.com/us/dictionary/english/comprise) of about 180 member nations.

Sociology (1995)

At the Nato [summit](https://www.collinsdictionary.com/us/dictionary/english/summit), he called on all the member nations to [pledge](https://www.collinsdictionary.com/us/dictionary/english/pledge) to [spend](https://www.collinsdictionary.com/us/dictionary/english/spend) at least 2% of their [national](https://www.collinsdictionary.com/us/dictionary/english/national) [income](https://www.collinsdictionary.com/us/dictionary/english/income) on [defence](https://www.collinsdictionary.com/us/dictionary/english/defence" \o "Definition of defence).

Times, Sunday Times (2015)

The [beneficiaries](https://www.collinsdictionary.com/us/dictionary/english/beneficiary) will not be [limited](https://www.collinsdictionary.com/us/dictionary/english/limit) to EU member nations, but [worldwide](https://www.collinsdictionary.com/us/dictionary/english/worldwide).

Times, Sunday Times (2012)

Definition of 'nation'

nation

(neɪʃən)[Explore 'nation' in the dictionary](https://www.collinsdictionary.com/us/dictionary/english/nation)

COUNTABLE NOUN

A nation is an individual country considered together with its social and political structures.

#### 2] Immediacy

#### Ought and should are used interchangeably.

Anastasia **Koltai 18**. CEO of MyEnglishTeacher, “Difference Between Ought to and Should,” MyEnglishTeacher, September 25, 2018, <https://www.myenglishteacher.eu/blog/difference-between-ought-to-and-should/>, RJP, DebateDrills.

In most cases, SHOULD and OUGHT TO are used interchangeably today. Both SHOULD and OUGHT TO are used to express advice, obligation, or duty.

#### “Should” is immediate

Summers 94 (Justice – Oklahoma Supreme Court, “Kelsey v. Dollarsaver Food Warehouse of Durant”, 1994 OK 123, 11-8, http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13)

¶4 The legal question to be resolved by the court is whether the word "should"[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13) in the May 18 order connotes futurity or may be deemed a ruling *in praesenti*.[14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn14) The answer to this query is not to be divined from rules of grammar;[15](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn15) it must be governed by the age-old practice culture of legal professionals and its immemorial language usage. To determine if the omission (from the critical May 18 entry) of the turgid phrase, "and the same hereby is", (1) makes it an in futuro ruling - i.e., an expression of what the judge will or would do at a later stage - or (2) constitutes an in in praesenti resolution of a disputed law issue, the trial judge's intent must be garnered from the four corners of the entire record.[16](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn16)

[CONTINUES – TO FOOTNOTE]

[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn13) "*Should*" not only is used as a "present indicative" synonymous with *ought* but also is the past tense of "shall" with various shades of meaning not always easy to analyze. See 57 C.J. Shall § 9, Judgments § 121 (1932). O. JESPERSEN, GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE (1984); St. Louis & S.F.R. Co. v. Brown, 45 Okl. 143, 144 P. 1075, 1080-81 (1914). For a more detailed explanation, see the Partridge quotation infra note 15. Certain contexts mandate a construction of the term "should" as more than merely indicating preference or desirability. Brown, supra at 1080-81 (jury instructions stating that jurors "should" reduce the amount of damages in proportion to the amount of contributory negligence of the plaintiff was held to imply an *obligation* *and to be more than advisory*); Carrigan v. California Horse Racing Board, 60 Wash. App. 79, [802 P.2d 813](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=802&box2=P.2D&box3=813) (1990) (one of the Rules of Appellate Procedure requiring that a party "should devote a section of the brief to the request for the fee or expenses" was interpreted to mean that a party is under an *obligation* to include the requested segment); State v. Rack, 318 S.W.2d 211, 215 (Mo. 1958) ("should" would mean the same as "shall" or "must" when used in an instruction to the jury which tells the triers they "should disregard false testimony"). [14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn14) *In praesenti* means literally "at the present time." BLACK'S LAW DICTIONARY 792 (6th Ed. 1990). In legal parlance the phrase denotes that which in law is *presently* or *immediately effective*, as opposed to something that *will* or *would* become effective *in the future [in futurol*]. See Van Wyck v. Knevals, [106 U.S. 360](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=106&box2=U.S.&box3=360), 365, 1 S.Ct. 336, 337, 27 L.Ed. 201 (1882).

#### The plan would require US companies to disclose information and waive IP protections---the counterplan has the US resist to avoid political backlash, but that violates WTO disclosure requirements.

Jorge Contreras 21. Presidential Scholar and Professor of Law at the University of Utah with an adjunct appointment in the Department of Human Genetics, JD @ Harvard, “US Support for a WTO Waiver of COVID-19 Intellectual Property – What Does it Mean?” Bill of Health Harvard Law, May 7, 2021, <https://blog.petrieflom.law.harvard.edu/2021/05/07/wto-waiver-intellectual-property-covid/>, RJP, DebateDrills

The proposed WTO IP waiver is significant because it includes trade secrets. Thus, under the waiver’s original language, a country that wished to suspend trade secret protection for COVID-19 technology could do so without violating the TRIPS Agreement. Such a country could also, presumably, mandate that foreign companies operating in the country disclose their proprietary manufacturing, storage, and testing information to local producers under a compulsory license.

The details of this disclosure requirement, and any compensation payable to the originator of the information, would need to be worked out in whatever waiver is eventually adopted by the WTO, but the prospect for a mandatory trade secret transfer — something that would be unprecedented in the international arena — is worth watching carefully. [As reported by Intellectual Asset Management on May 4, 2021](https://www.iam-media.com/coronavirus/brazilian-senate-passes-compulsory-covid-19-know-how-licensing-bill), the Brazilian Congress is currently considering legislation that would nullify the patents of any company that fails to disclose know-how and data related to a compulsory COVID-19 patent license. It will also be interesting to see whether the United States stands behind such a requirement, which goes far beyond the compulsory licensing of patents.

Will the U.S. require companies to share their know-how with others?

As noted above, under the waiver, a country could impose a trade secret disclosure requirement on companies operating within its jurisdiction. But that requirement would have little effect on U.S. vaccine producers who do not, themselves, have material operations overseas. Only the U.S. government could require a U.S.-based company to disclose its trade secrets. Would the U.S. impose such a requirement? This is not known, but I think it’s unlikely. It is one thing for the U.S. to agree not to challenge other countries’ compulsory licensing regimes as violations of TRIPS, but a very different thing for the U.S. to issue a compulsory licensing order of its own, particularly in the area of trade secrets, where it would be met with significant internal opposition.

#### DSB is underutilized currently but using it for major dispute settlement shores it up---that’s key to combat Chinese IP violations.

James **Bacchus 18**. Member of the [Herbert A. Stiefel Center for Trade Policy Studies](https://www.cato.org/herbert-stiefel-center-trade-policy-studies), the Distinguished University Professor of Global Affairs and director of the Center for Global Economic and Environmental Opportunity at the University of Central Florida. He was a founding judge and was twice the chairman—the chief judge—of the highest court of world trade, the Appellate Body of the World Trade Organization in Geneva, Switzerland. “How the World Trade Organization Can Curb China’s Intellectual Property Transgressions,” CATO, March 22, 2018, <https://www.cato.org/blog/how-world-trade-organization-can-curb-chinas-intellectual-property-transgressions>, RJP, DebateDrills.

Quite rightly, President Donald Trump and his Administration are targeting the transgressions of China against US intellectual property rights in their unfolding trade strategy. But why not use the WTO rules that offer a real remedy for the United States without resorting to illegal unilateral action outside the WTO?  
  
Seventeen years after China joined the WTO, China still falls considerably short of fulfilling its WTO obligations to protect intellectual property. About 70 percent of the software in use in China, valued at nearly $8.7 billion, is pirated. The annual cost to the US economy worldwide from pirated software, counterfeit goods, and the theft of trade secrets could be as high as $600 billion, with China at the top of the IP infringement list. China is the source of 87 percent of the counterfeit goods seized upon entry into the United States.  
  
One possible response by the United States is the one the Trump Administration seems to be taking: slapping billions of dollars of tariffs on imports of more than 100 Chinese products through unilateral trade action. Given its protectionist predilections, taking this approach is surely tempting to the Trump Administration. Doing so will, however, harm American workers, businesses, and consumers, and contribute to further turmoil in the global economy.

The results will likely include retaliation by China against the goods and services of American companies and workers; lawful economic sanctions imposed by China on American exports to China after the US lost to China in WTO cases; the hidden tax of higher prices for American consumers; less competitiveness in the US market and in other markets for American companies that depend on Chinese imports as intermediate goods in production; and doubtless still more American and global economic landmines from the downward spiral of tit-for-tat in international trade confrontations.  
  
These tariffs are not only self-defeating and counter-productive; they are also illegal under international law. Where an international dispute falls within the scope of coverage of the WTO treaty, taking unilateral action without first going to WTO dispute settlement for a legal ruling on whether there is a WTO violation is, in and of itself, a violation of the treaty. The WTO treaty establishes mandatory jurisdiction for the WTO dispute settlement system for all treaty-related disputes between and among WTO Members. The WTO Appellate Body has explained, “Article 23.1 of the (WTO Dispute Settlement Understanding) imposes a general obligation to redress a violation of obligations or other nullification or impairment of benefits under the covered agreements only by recourse to the rules and procedures of the DSU, and not through unilateral action.”  
  
Thus, the United States is not permitted by the international rules to which it has long since agreed to be the judge and the jury in its own case. Imposing tariffs on Chinese products without first obtaining a WTO ruling that Chinese actions are inconsistent with China’s WTO obligations is a clear violation by the United States of its WTO obligations to China – as WTO jurists will doubtless rule when China responds to the tariffs by challenging the tariffs in the WTO.  
  
Such a legal loss by the United States, with all its unforeseeable economic and geopolitical consequences, can be avoided while still confronting Chinese IP violations effectively. Before resorting to unilateral action outside the WTO and in violation of international law, the United States should take a closer look at the substantial rights it enjoys under the WTO treaty for protecting US intellectual property against abuse.  
  
Potential remedies in the WTO exist and should not be ignored. These remedies can be enforced through the pressure of WTO economic sanctions. WTO rules do not yet cover all the irritants that must be addressed in US-China trade relations. Even so, instead of just concluding that there are no adequate remedies under WTO rules to help stop IP infringement, the United States should first try to use the remedies in rules we have already negotiated that bind China along with all other WTO Members.  
  
A number of these rules have not yet been tested against China or any other country – which is not proof they will not work. Generally, when tried for the first time, WTO rules have been found to work, and, generally, when China has been found to be acting inconsistently with its WTO obligations, it has complied with WTO rulings. The actual extent of Chinese compliance with WTO judgments can be questioned; in some instances it is seen by some as only “paper compliance.” But whether any one WTO rule can in fact be enforced cannot be known if no WTO Member bothers to try to enforce it.  
  
The WTO rules in the WTO Agreement on the Trade-related Aspects of Intellectual Property Rights – the so-called TRIPS Agreement – are unique among WTO rules because they impose affirmative obligations. Yet, this affirmative aspect of WTO intellectual property rules has been largely unexplored in WTO dispute settlement. In particular, WTO Members have so far refrained from challenging other WTO Members for failing to enforce intellectual property rights.  
  
On enforcement, Article 41.1 of the TRIPS Agreement imposes an affirmative obligation on all WTO Members: “Members shall ensure that enforcement procedures… are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.”  
  
Note that this “shall” be done by all WTO Members; it is mandatory for compliance with their WTO obligations. And yet what does this obligation mean by requiring that effective actions against infringements must be “available”? Is this obligation fulfilled by having sound laws on the books, as is generally the case with China? Or must those laws also be enforced effectively in practice, which is often not the case with China?  
  
The Appellate Body has said that “making something *available* means making it ‘obtainable,’ putting it ‘within one’s reach’ and ‘at one’s disposal’ in a way that has sufficient form or efficacy.” Thus, simply having a law on the books is not enough. That law must have real force in the real world of commerce. This ruling by the Appellate Body related to the use of the word “available” in Article 42 of the TRIPS Agreement and to a legal claim seeking fair and equitable access to civil judicial procedures. Yet the same reasoning applies equally to the enforcement of substantive rights under Article 41.  
  
In the past, the United States has challenged certain parts of the overall Chinese legal system for intellectual property protection – and successfully – in WTO dispute settlement. Despite its overall concerns about enforcement by China of US intellectual property rights, the United States has not, however, challenged the Chinese system as a whole in the WTO. Instead of indulging in the illegality of unilateral tariffs outside the legal framework of the WTO, the Trump Administration should initiate a comprehensive legal challenge in the WTO, not merely, as before, to the bits and pieces of particular Chinese IP enforcement, but rather *to the entirety of the Chinese IP enforcement system*.  
  
To be sure, a systemic challenge by the United States to the application of all China’s inadequate measures relating to intellectual property protection would put the WTO dispute settlement system to a test. It would, what’s more, put both China and the United States to the test of their commitment to the WTO and, especially, to a rules-based world trading system.  
  
As Trump’s trade lawyers will hasten to say, a systemic IP case against China in the WTO would also involve a perhaps unprecedented amount of fact-gathering. It would necessitate an outpouring of voluminous legal pleadings. It would, furthermore, force the WTO Members and the WTO jurists to face some fundamental questions about the rules-based trading system. Yet it could also provide the basis for fashioning a legal remedy that would in the end be mutually acceptable to both countries, and could therefore help prevent commercial conflict and reduce a significant obstacle to mutually beneficial US-China relations.

#### Stopping tech stealing is key to avoid war

Timothy R. **Heath 18**. RAND Senior Defense and International Analyst, “Avoiding “Avoiding U.S.-China Competition Is Futile: Why the Best Option Is to Manage Strategic Rivalry”; Asia Policy; Vol 13 No 2; April 2018, RJP, DebateDrills

This article argues that the structural drivers of U.S.-China competition are too deep to resolve through cooperative engagement and that policymakers must instead accept the reality of strategic rivalry and aim to manage it at a lower level of intensity. main argument Rising tensions between China and the U.S. have spurred fears that the two countries could end up in conflict or recreate the Cold War. To avoid these outcomes, analysts have proposed ways to defuse competition and promote cooperation. However, because these arguments do not address the structural drivers underpinning U.S.-China competition, such proposals are unlikely to end the rivalry. Conflict is not inevitable, however, and aggressive strategies that unnecessarily aggravate the sources of rivalry are likely to prove dangerously counterproductive. The best option at this point is, paradoxically, for the U.S. to accept the reality of the growing strategic rivalry and manage it at a lower level of intensity. policy implications • Maintaining a technological edge is critical for the U.S. to successfully manage the rivalry with China. Policies should be pursued to ensure that the U.S. continues to attract and nurture the best science and technology talent and retains its status as the global leader in technology. • To compete with China’s narrative about leading regional integration, the U.S. should both put forth a compelling vision for the region that encompasses widely held economic, security, and political values and continue to bolster its diplomatic and military positions in Asia. • To maintain the U.S.-China rivalry at a stable level, policymakers in both countries should prioritize measures that discourage the mobilization of popular sentiment against the other country and encourage cultural exchanges. • U.S.-China competition will likely become increasingly entwined with rivalries between China and U.S. allies and partners such as Japan and India. U.S. policymakers will need to take into account the independent dynamics of those separate rivalries when managing relations with China. The United States and China find themselves increasingly enmeshed in a strategic rivalry, the basic nature of which remains poorly understood in the United States. To be sure, disagreements between the two countries have gained widespread attention. Disputes involving Chinese confrontations with U.S. allies and partners such as Japan, the Philippines, and Taiwan have frequently grabbed the headlines. At other times, disagreements over Chinese trade practices and U.S. military activities in the South China Sea have occasioned discord. All these sources of conflict are genuine, but they mask the main drivers of rivalry, which are twofold. First, the United States and China are locked in a contest for primacy—most clearly in Asia and probably globally as well. The United States has been the dominant power, and China seeks to eventually supplant it. By definition, two different states cannot simultaneously share primacy at either the regional or global level. Second, economic, demographic, and military trajectories suggest that China has the potential to contend in a significant way for leadership at the global systemic level. At this level, the most decisive competition will be for technological leadership. Should China supplant the United States as the world’s premier country in terms of technology, its claim to regional and global supremacy will be difficult to deny. And once it has gained that supremacy, China will be well positioned to restructure institutional arrangements to privilege itself and disadvantage the United States. Although this competition is occurring simultaneously at both levels, observers have focused primarily on the struggle for primacy at the regional level and overlooked or downplayed the competition at the global systemic level.1 To counter China’s pursuit of regional primacy, the United States has bolstered its alliances in Asia (albeit inconsistently), expanded diplomatic outreach to China and rising powers in Southeast Asia, and revised its military posture—efforts captured by President Barack Obama’s “rebalance to Asia.” President Donald Trump may have abandoned the rebalance, but many of the related initiatives remain more or less in place.2 China’s challenge at the global systemic level, especially in the field of technology, has received less attention. Confidence in the proven U.S. ability to produce new technologies and facile assumptions about the difficulties China will face in promoting innovation in new industries have led many to dismiss the challenge posed by China. **But the contest for technological leadership is actually even more consequential than that for regional primacy.** Should China succeed in surpassing the United States as the world’s technological leader, U.S. diplomacy and military power will not suffice to hold the line either in Asia or around the globe**.** Under those conditions, countries throughout the world, including U.S. allies in Asia, will be forced to come to terms with the new leading economy. Military power projection could be far less relevant as China moves to consolidate its leading status at both the regional and global levels in such a scenario. Accordingly, although the United States cannot abandon its efforts to bolster its diplomatic and military position in Asia, the country must step up its efforts to strengthen its faltering lead in new technology development. While China clearly grasps the stakes, it is not clear that the United States does. For example, China’s government has promoted R&D into quantum computing. The investment appears to be paying off, as the country has leaped ahead of the United States in developing quantum communications.3 Similarly, the U.S. Congress has proposed to dispense with subsidies for the purchase of electric vehicles, even as China pushes ahead in its plan to become the lead producer of this technology.4 And while the U.S. government seeks to restrict immigration and discourage foreign students from attending U.S. universities (and staying after they receive their advanced training), China has revised its policies to welcome foreigners, prioritizing those with science and technology expertise. Moreover, Chinese investment in basic R&D is rapidly catching up to that of the United States.5 Studies have also noted a shrinking U.S. lead in science and technology as such investment is beginning to bear fruit.6 Similarly, the United States has lost its once-undisputed lead in the per capita number of engineers and scientists.7 Understanding the nature of the U.S.-China rivalry at the regional and global systemic levels, as well as how these two levels interact with one another, is essential if the United States is to successfully manage the challenge posed by China in a manner that avoids war. This study aims to contribute to that understanding. The article is organized into the following sections: u pp. 95–102 provide an overview of the growing rivalry between China and the United States, including a discussion of the meaning and role of strategic rivalry in interstate conflict and a comparison with the U.S.-China rivalry during the Cold War. u pp. 102–4 review the dynamics of the rivalry at the regional systemic level. u pp. 104–10 analyze the dynamics of the rivalry at the global systemic level. u pp. 110–15 examine why proposals to avoid rivalry through cooperation or aggressive competition are unlikely to succeed. u pp. 115–19 discuss the idea of strategic rivalry management and offer recommendations on ways to sustain the rivalry at a lower level of intensity the growing rivalry between the united states and china Strains between China and the United States have deepened in the past few years over a proliferating array of issues. President Trump has stepped up accusations against China of unfair trade practices and inadequate pressure on North Korea. He also provoked controversy early in his term when he floated the idea of increasing official contacts with Taiwan, which Beijing considers a renegade province.8 These disputes add to tensions that had expanded under President Obama, who moved to strengthen U.S. alliances in Asia, promote a regional trade pact, criticize Chinese behavior in the cyber and maritime domains, and shift more military assets to the Asia-Pacific as part of the rebalance to Asia strategy.9 China has in turn dismissed U.S. concerns about the construction of artificial islands in the South China Sea, intensified its criticism of U.S. security leadership in Asia, and tightened its grip on disputed maritime territories.10 The baleful state of bilateral relations has spurred plenty of finger-pointing. On the Chinese side, officials denounce the United States’ “Cold War mindset” and warn of conflict if Washington does not adjust its policies.11 A 2015 defense white paper described an “intensifying competition” between the great powers.12 Military officials and many Chinese analysts regard increasing tension between the two countries as unavoidable, although they do not regard war as likely. People’s Liberation Army (PLA) deputy chief of staff Qi Jianguo commented that “no conflict and no confrontation does not mean no struggle” between China and the United States.13 According to Chinese official media, polls in China suggest a large majority believes that the United States intends to pursue a containment policy.14 Reflecting this point of view, Niu Xinchun, a scholar at the China Institutes of Contemporary International Relations, argued that the “greatest obstacle to the further integration of emerging countries such as China into the international system comes from the United States.”15 Western officials and commentators tend to blame China for current strains. Senior U.S. leaders have criticized “assertive” Chinese behavior, while some analysts blame Xi Jinping for pushing a more confrontational set of policies.16 Other Western observers worry that a further souring of relations could lead to conflict.17 But even if war remains unlikely, the deepening tensions increase the risks of miscalculation, crises, and potential military clashes involving the world’s two largest powers. Echoing a view widely held among U.S. foreign policy experts and officials, former CIA director General Michael Hayden has warned that mishandling the U.S.-China relationship could be “catastrophic.”18 Rivalry at the Heart of the U.S.-China Relationship This widespread concern reflects a realistic appraisal of the dangers inherent in the U.S.-China relationship. But developing successful policies to manage an increasingly sensitive and complex situation requires an accurate assessment of the phenomenon of interstate rivalry that lies at the heart of that relationship. Rivalry is a concept that, while widely acknowledged, remains poorly understood. To be sure, most experts take for granted the idea that powerful nations compete for status and influence, and they acknowledge the danger posed by a rising power’s challenge to a status quo power. Yet investigation into the phenomenon of rivalry too often stops at these well-trodden findings. Less often discussed are the conclusions regarding the dynamics of rivalry that experts on conflict studies have arrived at within the past few years. Much of this scholarship draws from improvements to the analyses and data regarding interstate crisis and conflict.19 This research has generated useful and interesting insights regarding the start and conclusion of rivalries, crises, and war, although these remain largely unexplored outside academic circles. Analysts have established, for example, that rivalry is perhaps the most important driver of interstate conflict. As defined by political scientists, “rivals” are states that regard each other as “enemies,” sources of real or potential threat, and as competitors. At the root of rivalries thus lie disputes over incompatible goals and perceptions that countries possess both the ability (real or potential) and the intention to harm each other. Wars have historically tended to be fought by pairings of these states and their allies. Rivals have opposed each other in 77% of wars since 1816 and in over 90% of wars since 1945.20 Not only are rivals more likely to fight than non-rivals, but rivals also have a tendency to be recidivists because they are unable to resolve their political differences on the battlefield. Yet that does not always discourage them from trying to do so repeatedly. Rivals that cannot prevail due to parity frequently compete for advantage by building internal strength through arms racing or by leveraging external power through the strengthening of alliances and partnerships. Rivals are also prone to serial militarized crises**.** Mutual perceptions of each other as hostile enemies and the inconclusive outcome of previous militarized disputes typically fuel a pattern of recurrent crises characterized by deepening resentment, distrust, and growing willingness to risk escalation. Studies have also established that the risk of conflict increases sharply after three episodes of militarized crises.21 Rivalries do not progress in a linear direction, however. Their intensity can wax and wane in response to shocks and other important developments. Periods of relative stability can alternate with turbulent periods of tension and conflict. Similarly, cooperative activities can be interspersed with periods of acute tension and hostility. Nevertheless, the link between rivalry, crises, and interstate conflict is pervasive. Drawing from these sources, one can describe the Sino-U.S. relationship as a rivalry characterized as a competition between two major powers over incompatible goals regarding their status, leadership, and influence over a particular region—in this case principally the Asia-Pacific. The dynamics of this type of strategic rivalry differ in significant ways from the far more numerous rivalries over territory that have characterized conflict between so many countries, especially weaker and poorer ones. In contrast with rivalries over territories, strategic rivals do not necessarily share borders, although allies of one power may be engaged in a territorial dispute with the other major power. Strategic rivalries among major powers tend to be especially long-lived, with the average enduring for about 55 years.22 Strategic rivalries are incredibly complex phenomena that include overlapping and often reinforcing layers of disputes over leadership, status, and territory between the principal rivals and their allies. Such rivalries are almost always multilateral affairs that also involve allies and partners, some of which have their own rivalries with the other side. Competition in the economic, political, and military domains can serve as expressions as well as drivers of rivalry, as can sports and cultural competition. Strategic rivalries can be confined to one region, with the basic conflict reducible in some respects to which rival will occupy the top rung of the regional hierarchy. In other cases, however, a rivalry can span regional and global domains either sequentially or simultaneously. The U.S.-China rivalry, for instance, is already both a regional and, to a lesser extent, a global rivalry, but there is still considerable room for competition to expand. The complex and overlapping nature of the disputes makes strategic rivalries extremely crisis- and conflict-prone. Strategic rivalries come in a grim package deal that includes strained and hostile relations, serial crises, and in some cases wars. The comprehensive and multifaceted nature of the disputes also explains why such rivalries have proved so durable and why their wars have been so devastating. Conflict between strategic rivals has historically occasioned the most destructive wars, of which World Wars I and II are the most recent examples. The fact that experts at the time of each historic episode of systemic conflict consistently underestimated the duration or extent of war offers cold comfort to analysts today who seek to predict the trajectory of any conflict that might involve China and the United States. Comparisons of the Current Environment with the U.S.-China Rivalry during the Cold War How did the two countries arrive at this position? The most widely accepted narrative argues that China’s rapid economic growth has provided the resources with which it can press demands on long unresolved issues such as unification with Taiwan. China and the United States may have enjoyed stable relations in the 1980s when they cooperated on a limited basis against the Soviet Union, but that foundation of cooperation eroded considerably once the Soviet bloc dissolved in the early 1990s. Moreover, China’s rapid growth in economic power has given the country fresh resources to press its own demands on the United States and U.S. allies. By 2010, China’s economy had outpaced that of Japan to become the second-largest in the world.23 The persistence of long-standing sources of antagonism, such as the U.S. security partnership with Taiwan, has both reflected and aggravated a broader competition for leadership. For its own reasons, Washington has resisted Beijing’s demands, and the result has been growing fear and distrust.24 The intensifying rivalry between the rising power and the status quo leader is as old as antiquity itself. Indeed, Graham Allison coined the term “Thucydides trap” to describe such a situation, a term that he subsequently applied to the current U.S.-China situation.25 The popular narrative is not entirely incorrect, yet in some ways it remains incomplete. A closer look at history reminds us that antagonism between China and the United States is not unprecedented. In the 1950s and 1960s, the two countries engaged in an intense strategic competition for status and influence in Asia, one that occasionally burned hot, as it did when they clashed on the Korean Peninsula or more indirectly in Vietnam. This Cold War–era rivalry saw a complex network of competing alliances and partnerships, principally in Asia. The United States supported Taiwan and South Korea in bitter disputes with China and its allies, North Korea and the Soviet Union. This rivalry terminated in the 1970s primarily due to Beijing’s decision to counter a growing Soviet menace and the United States’ decision to pursue China as a potential partner for its own rivalry with the Soviet Union. But the existence of a period of intense U.S.-Chinese tension and competition provides a helpful baseline of comparison. What requires explanation is not the fact that the United States and China are engaged in a rivalry but the difference between today’s rivalry and that of the Cold War. What distinguishes the rivalry today from that of the earlier period is both the closer parity in relative power—albeit still more potential than real—between the two countries and the comprehensiveness, complexity, and systemic nature of the disputes between them. Paradoxically, these features make the current rivalry potentially far more threatening to the United States, despite the fact that so far U.S.-China relations have remained peaceful, and even though the U.S. and Chinese militaries fought each other in the Korean War. The dangerous potential of the current rivalry ultimately owes to the risk that China could rise to the position of global system leader and subordinate the United States accordingly. As has happened in previous power transitions, China as a system leader could exploit existing arrangements to its benefit and to the detriment of the outgoing leader, the United States. Due to the enormous rewards that accrue to a systemic leader and the high costs for the state that loses this position**,** struggles for global leadership have historically proved to be especially destructive. The possibility that China and the United States could find themselves in a similar struggle, while unlikely at this point, cannot be ruled out given the reality of the relative decline in U.S. power and the concomitant increase in Chinese comprehensive national power. At the most basic level, this fact may be measured superficially by the U.S. share of world GDP, which eroded from 40% in 1950 to 16% in 2014, adjusted for purchasing power parity. Over the same period, China’s share expanded from around 5% to 17%.26 An important consequence of the narrowing of the gap in comprehensive power has been an intensifying competition for leadership in the international economic and political order. In this way, the popular discussion of the Thucydides trap correctly recognizes the dangers of the U.S.-China competition. This feature contrasts sharply with the previous episode of rivalry. In the 1950s and 1960s, the asymmetry in power meant that the United States and China competed for influence and even clashed militarily in countries along China’s borders, but rarely elsewhere. As a largely rural, impoverished country, China had little stake in the system of global trade promoted by the industrialized West. Excluded from the United Nations, Maoist China also lacked the institutional ability to influence geopolitics and project power much beyond its immediate environs—and even that capability was sorely handicapped. Outside Asia, the United States faced minimal competition from China and generally regarded the Soviet Union as a more pressing threat. By contrast, the current competition features a China fully enmeshed in a political and economic order led by the United States. While generally supportive of this order, China is also seeking to revise aspects of the regional and international order that it regards as obstacles to the country’s revitalization as a great power. The main theater of this competition for influence and leadership is the Asia-Pacific, as it was in the Cold War, but U.S.-China rivalry increasingly is expanding globally. Moreover, unlike the largely military, regional, and ideological Cold War competition, the current contest is far more multifaceted and comprehensive in nature; it includes military, economic, technological, and political dimensions. The following two sections review the state of the competition at both the regional and the global systemic levels. the u.s.-china rivalry at the regional level At the regional level, U.S.-China competition spans the political, economic, and military realms. Politically, the two countries have feuded over the role of liberal values and ideals, a dispute that widened after the 1989 Tiananmen Square massacre. However, the 1996 Taiwan Strait crisis elevated the potential threat of conflict between the two countries and may therefore be regarded as the starting point of the current rivalry. Coinciding with impressive gains in China’s economic and military power following two decades of market reforms, the standoff saw Washington and Beijing deploy military assets to back up their respective positions regarding Taiwan’s right to hold a presidential election, elevating the risk of a clash. Since then, the competition for political influence and leadership has intensified. In 2011, the United States announced its rebalance to Asia, which was aimed in part at shoring up U.S. alliances, partnerships, and influence.27 Although on the surface Washington has abandoned the effort, the Trump administration has reintroduced a vision for Asia’s economic and security order premised on values favorable to U.S. interests.28 The 2017 National Security Strategy stated, for example, that the United States upholds a “free and open Indo-Pacific.”29 Beijing, by contrast, has increased its efforts to advance a vision for a regional order premised on Chinese leadership. In recent years, China has promoted major economic and geostrategic initiatives to deepen Asia’s economic integration through the Belt and Road Initiative, Asian Infrastructure Investment Bank (AIIB), and other initiatives.30 In 2017, China for the first time issued a white paper that outlined the government’s vision for Asia-Pacific security. The paper stated that China takes the advancement of regional prosperity and stability “as its own responsibility.”31 These policies build on directives issued by Xi Jinping in 2013, when he called for policies to bolster China’s attractiveness as a regional leader.32 Economically, the two countries are competing over the evolution of Asia’s economic future—a region anticipated to drive global growth in coming decades. Both countries are also competing to shape the terms of trade. President Trump may have abandoned the Trans-Pacific Partnership (TPP), but his advisers have advocated other measures to shape favorable trade terms.33 Meanwhile, China has stepped up advocacy of the Regional Comprehensive Economic Partnership, a proposed free trade agreement for the region that excludes the United States.34 China also has promoted the AIIB, while the United States and Japan continue to instead support the Asian Development Bank.35 Militarily, the growing arms race and the establishment of rival security institutions stand among the most obvious manifestations of an increasing competition in this domain. China and the United States have designed an array of military capabilities and doctrines partly aimed at each other. The PLA has developed weapons systems to counter potential U.S. intervention in any contingency along China’s periphery, which the United States has in turn sought to counter with its own innovations, such as the Joint Operational Access Concept.36 U.S. secretaries of defense Chuck Hagel and Ashton Carter outlined a “third offset” strategy to compete with China and Russia in military technology.37 To promote regional security, the United States has strengthened its military alliances and partnerships, while China has strengthened ties with Russia and argued that regional security is best protected through the Shanghai Cooperation Organisation, the Conference on Interaction and Confidence Building Measures in Asia, and other Chinese-led institutions. In 2014, Xi indirectly rebuked the United States for seeking to bolster its security leadership in the region, stating that “it is for the people of Asia to uphold the security of Asia.”38

### 2

#### Our thesis is that the collapse of capitalism is inevitable, it is a question of now or later: you should frame your decision through an anti-capitalist lens by centering the valorization of productivity that aff’s logic is founded upon.

Kuang 20 [Da Kuang and Changyi Huang are professors at the Huazhong University of Science and Technology, College of Marxism in Wuhan 430074, China. A Study of Marx’s Thought on the Speed of Capital Accumulation, Presented at the 2020 International Conference on Social Science, Economics and Education Research (SSEER 2020), Atlantic Press: Advances in Social Science, Education and Humanities Research Volume 455, 8-22-21, amrita]

III. CONTEMPORARY ENLIGHTENMENT: **CAPITALISM IS BOUND TO DIE OUT IN THE LONG-TERM STAGNATION OF CAPITAL ACCUMULATION** As we all know, Marx and Engels reached a most important scientific conclusion in the Manifesto of the Communist Party: **the death of the bourgeoisie and the victory of the proletariat are equally inevitable.** This is the famous “Two Necessities” principle of Marxism. If we study **Marx’s thought of the speed of capital accumulation, we will come to the conclusion that capitalism is bound to die out in the long-term stagnation of capital accumulation.** Wallerstein believes that **although the production for the purpose of pursuing profits has a history of thousands of years, this mode of production has never occupied a dominant position in these historical systems. Only capitalism regards the endless accumulation of profits as the fundamental feature of its own system**. Wallerstein pointed out that the capitalist system has been maintained for more than 500 years, and the fundamental policy of endless capital accumulation has been quite successful. However, **the historical stage based on this has come to an end, and the late capitalism is coming to an end.** Andrew Kleiman made **an empirical study on the change trend of American profit margin from 1929 to 2009. He believed that after the boom period of World War II, the capital profit margin of the whole economic system was indeed declining irreversibly.** Robert Brenner calculated the declining trend of manufacturing profit margin in the United States and Japan since the 1950s. Among them, **the average profit margin of manufacturing industry in the United States has more than doubled, and the average profit margin of manufacturing industry in Japan has more than tripled**. These empirical studies **confirm Marx’s idea that the rate of capital profit keeps falling and the rate of capital accumulation tends to stagnate.** The global financial crisis that broke out in 2007-2008 is the most serious crisis of capitalism since the great depression in the 1930s. **Although the crisis is presented in the form of finance, the underlying law is still “relative overproduction”, that is, trying to expand credit consumption to alleviate the contradiction between the expansion of production and the relative reduction of consumption capacity, accelerating the real estate and finance** The development of bubbles. But **this contradiction is only temporarily covered by bubbles, and after a long period of accumulation and fermentation, the crisis finally broke out**. After 10 years of evolution**, the capitalist world has not recovered from crisis and stagnation, but has expanded into a structural crisis of capitalism along the path of financial crisis → economic crisis → financial crisis → debt crisis.** At the same time, **contemporary capitalism also faces the absolute limit of capital accumulation caused by the crisis of population aging and ecological crisis**. According to statistics, in 2014, the total population of 28 countries in the EU was 508 million, of which 18.5% were aged over 65, 19.9% were aged between 50 and 64, and 38.4% were aged between 50 and 64. **The trend of population aging will inevitably lead to the extreme shortage of labor force, increase labor cost, and further reduce the profit margin of capital; and the ecological crisis will gradually become the same or even more serious problem as the economic crisis.** As the existing capital accumulation models all go bankrupt, **the speed of capital accumulation will inevitably further decline. The economic cycle theory of western mainstream economics interprets the capitalist economic crisis as a kind of normal economic fluctuation, and holds that capital can always overcome the crisis and stagnation, and then accelerate the accumulation again. This kind of circular movement, which only attributes capital accumulation to quantitative change, conceals a historical fact: the final result of the crisis and stagnation of capital accumulation is the qualitative change of capitalist ownership, which is an irreversible linear process**. Over the past 200 years, **the world economic crisis has occurred more than 20 times, some of which directly triggered the proletarian revolution**, some of which first broke out in war and then triggered the proletarian revolution. **For example,** the result of **the capitalist economic crisis in 1847 was the final explosion of the French Revolution in June;** The capitalist economic crisis of 1867-1868 first triggered the Franco Prussian War, and finally triggered the Paris Commune Revolution; the capitalist economic crisis of 1907-1908 first triggered the first World War, and finally triggered the October Revolution of Russia which opened a new era of human history in 1917; the capitalist economic crisis of 1929-1933 gave birth to the second World War, and finally the war As a result, Eastern European countries including East Germany, Yugoslavia, Poland, Hungary, Romania and other countries, as well as China, North Korea, Vietnam, Cuba, Albania and other countries have embarked on the socialist road. **In addition to the proletarian socialist revolution caused by the economic crisis, the capitalist internal system of ownership has also made major adjustments in response to the economic crisis.** From individual private capital to stock system, this is the first adjustment of capitalist ownership; from stock system to monopoly, this is the second adjustment of capitalist ownership; from private stock monopoly to capitalist state monopoly, this is the third adjustment of capitalist ownership; from capitalist state monopoly to international monopoly, this is the fourth adjustment of capitalist ownership. As a result, the capitalist ownership of means of production is becoming more and more like public ownership rather than private ownership. It is getting further and further away from the original private ownership and closer to public ownership. It can be predicted **that capitalism will inevitably die out in the long-term stagnation of capital accumulation. The ultimate fate of capitalism is to be replaced** by socialism.

#### The affirmative resets the cycle and rejuvenates short-term capitalist accumulation in two ways.

#### First, is false liberalism. The plan is representative of the idea that capitalism can be saved- eliminating “intellectual property protections” is a scheme that aims to boost falling rates of profit and improve capital accumulation.

Gilbert 19 [Geoff Gilbert is a Professor of Law in the School of Law and Human Rights Centre at the University of Essex. He was Head of Department between 2000-2003 and 2011-13. In 2012, he was appointed a Professorial Visiting Fellow at the University of New South Wales in Sydney. He was Editor-in-Chief of the International Journal of Refugee Law from 2002-15 and is co-Editor-in-Chief as of September 2019; he also sits on the Advisory Board., “Free trade” is today’s imperialism by the 1 percent, 1-13-2019,No Publication,https://www.bilaterals.org/?free-trade-is-today-s-imperialism, 8-21-2021 amrita]

As Lawrence Summers, economic adviser to the Clinton and Obama administrations, points out, the GATT/WTO free trade regime has been so successful that today’s free trade agreements aren’t even about the traditional obstacles to free trade, as these obstacles are already effectively eliminated in most countries. **Instead, today’s agreements involve protecting the property rights (especially the intellectual property rights) of multinationals and harmonizing the regulatory regimes across countries with which multinationals must comply. In other words, today’s free trade agreements are about enforcing the unequal economic relationships that global North corporations have continued to enjoy since the times of colonialism. The most egregious example of global North countries using the WTO to codify their colonial unequal economic relationships is the Trade-Related Aspects of Intellectual Property Rights (TRIPs), an agreement that is part of the WTO. TRIPs extend patent, copyright and trademark protections to all WTO members — effectively the entire world economy.** However, **the global North is a net intellectual property producer and the global South is a net intellectual property consumer. TRIPs’ intellectual property protections extend to goods like pharmaceuticals**, digital technology hardware and software, and most art and media entertainment**. Intellectual property protections allow the global North corporations that own the patents, copyrights and trademarks for these products to maintain monopoly control over them. Global North corporations can charge high prices for pharmaceuticals and digital technology to global South consumers, transferring wealth to global North corporations. Further, intellectual property protections make it impossible for global South corporations to compete with global North corporations to produce these goods, meaning that global North corporations can continue to monopolize the profits**. Since the post-WWII restructuring of the international economy, global South countries have needed to find capital to develop their own industries. **The GATT/WTO free trade framework bars global South countries from creating policies that can help their own industries develop their own surplus capital, as described above, so global South countries have resorted to borrowing money from the financial sector**. The IMF and the World Bank have promoted and subsidized global North banks lending to global South countries, and have only made capital available to global South countries if they accept the conditions of the North’s free trade policies, as well as privatization of any state-owned businesses and deregulation of their economies. **Through the work of GATT/WTO, the IMF and the World Bank, global South governments and corporations have been kept in the unequal economic position developed during colonialism.** As Vijay Prashad explains, US and Western militaries have also helped to expand free trade throughout the world by supporting military dictators and military coups throughout Asia, Africa and Latin America. **This economic and military violence is the visible hand the global North governments and corporations have used to concentrate the world’s wealth**. This visible hand explains how global North, and especially US, corporations continue to own and control a disproportionate amount of the most profitable industries in the global economy.

#### Second is WTO legitimacy. The plan is a colonialist revision that re-packages the WTO as a legitimate organization that can overcome its insidious past towards a future of equal free trade—that decks class consciousness.

Gilbert 19 [Geoff Gilbert is a Professor of Law in the School of Law and Human Rights Centre at the University of Essex. He was Head of Department between 2000-2003 and 2011-13. In 2012, he was appointed a Professorial Visiting Fellow at the University of New South Wales in Sydney. He was Editor-in-Chief of the International Journal of Refugee Law from 2002-15 and is co-Editor-in-Chief as of September 2019; he also sits on the Advisory Board., “Free trade” is today’s imperialism by the 1 percent, 1-13-2019,No Publication,https://www.bilaterals.org/?free-trade-is-today-s-imperialism, 8-21-2021 amrita]

Free Trade Imperialism: **Continuing the Unequal Trade of Colonialism With mass global South resistance to colonialism increasing in the early 1900s and intensifying in the aftermath of the world wars, global North corporations and governments no longer needed colonialism.** From their perspective, moving toward the international economic model that would become free trade was much more cost-effective. As the US sociologist Johanna Bockman writes of US government and business elites in the aftermath of the second world war, **“[They] supported neither free trade nor globalization imagined as a level playing field with flows moving evenly around the globe. Instead, they supported the international neocolonial system through the [General Agreement on Tariffs and Trade (GATT)], while using the rhetoric of free trade and modernization to support US national interests.”** Roughly 70 years after the global North created the post-second world war international order, global North corporations continue to own and control a disproportionate amount of the most profitable industries in the global economy. Though many US commentators warn of the rise of Brazil, Russia, India and China, US corporations, in 2013, still had leading positions in 18 of the 25 most profitable industries. Moreover**, US corporations are dominant in the most profitable advanced industries, including banking and financial services, aerospace and defense, chemicals, computer hardware and software, insurance, pharmaceuticals, heavy machinery, and oil and gas.** While the US has roughly 5 percent of the world’s population and 25 percent of the global share of gross domestic product, US corporations likely control far more than 25 percent of the profit-producing capital in the world. **These profits are concentrated among the shareholders of multinationals incorporated in the US, which, according to one estimate, are at least 85 percent owned by US citizens. These profits are not being shared with vast majority of people in the world, most of whom do not own any wealth, let alone shares in corporations.** Global North and US multinational dominance of the world economy is not an accident, as global North governments and multinationals have used the international institutions they created following the second world war to continue to dominate the world economy. **These institutions include the United Nations; the GATT, which has since become the World Trade Organization (WTO); the International Monetary Fund (IMF); and the World Bank. The WTO is the main international institution that makes and enforces trade policies. The core GATT/WTO principles are “non-discrimination” and “national treatment.**” Non-discrimination means that countries will not use their trade policies to discriminate between goods that are produced in different foreign countries. National treatment means that countries will not use their trade policies to favor products produced in their own country over products produced in any other country. As described above, global North countries used their trade policies to promote the products of the corporations based in their countries for centuries. **The free trade principles of non-discrimination and national treatment deny the ability of any country to use those same policies today. This allows global North corporations to ensure that global South governments will not create policies that can help their own corporations develop the wealth they need to compete**. **Additionally, since the GATT/WTO free trade framework facilitates continued global North corporate control over advanced industries, global North corporations are far more likely to develop the high-tech industries of the future, as they own the profits from today’s advanced industries which they can invest in research and development.**

#### But capitalism can’t be saved. The short-term rejuvenation simply pushes back the long-term inevitable collapse which dooms us to death by climate change—this card preempts all their “cap solves climate change” answers.

Foster 18 [John Bellamy Foster, John Bellamy Foster is a professor of sociology at the University of Oregon and also editor of Monthly Review. He writes about political economy of capitalism and economic crisis, ecology and ecological crisis, and Marxist theory. “Making War on the Planet.” Monthly Review. September 1, 2018. <https://monthlyreview.org/2018/09/01/making-war-on-the-planet/> recut 8-22-2021 amrita]

A short fuse is burning. At the present rate of global emissions, the world is projected to reach the trillionth metric ton of cumulative carbon emissions, breaking the global carbon budget, in less than two decades.[1](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en1) This would usher in a period of dangerous climate change that could well prove irreversible, affecting the climate for centuries if not millennia. Even if the entire world economy were to cease emitting carbon dioxide at the present moment, the extra carbon already accumulated in the atmosphere virtually guarantees that climate change will continue with damaging effects to the human species and life in general. However, reaching the 2°C increase in global average temperature guardrail, associated with a level of carbon concentration in the environment of 450 ppm, would lead to a qualitatively different condition. At that point, climate feedbacks would increasingly come into play threatening to catapult global average temperatures to 3°C or 4°C above preindustrial levels within this century, in the lifetime of many individuals alive today. The situation is only made more serious by the emission of other greenhouse gases, including methane and nitrous oxide. The enormous dangers that rapid climate change present to humanity as a whole, and the inability of the existing capitalist political-economic structure to address them, symbolized by the presence of Donald Trump in the White House, have engendered a desperate search for technofixes in the form of schemes for geoengineering, defined as massive, deliberate human interventions to manipulate the entire climate or the planet as a whole. Not only is geoengineering now being enthusiastically pushed by today’s billionaire class, as represented by figures like Bill Gates and Richard Branson; by environmental organizations such as the Environmental Defense Fund and the Natural Resources Defense Council; by think tanks like the Breakthrough Institute and Climate Code Red; and by fossil-fuel corporations like Exxon Mobil and Shell—it is also being actively pursued by the governments of the United States, the United Kingdom, China, and Russia. The UN Intergovernmental Panel on Climate Change (IPCC) has incorporated negative emissions strategies based on geoengineering (in the form of Bio-energy with Carbon Capture and Storage, or BECCS) into nearly all of its climate models. Even some figures on the political left (where “accelerationist” ideas have recently taken hold in some quarters) have grabbed uncritically onto geoengineering as a deus ex machina—a way of defending an ecomodernist economic and technological strategy—as witnessed by a number of contributions to Jacobin magazine’s Summer 2017 Earth, Wind, and Fire issue.[2](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en2) If the Earth System is to avoid 450 ppm of carbon concentration in the atmosphere and is to return to the Holocene average of 350 ppm, some negative emissions by technological means, and hence geoengineering on at least a limited scale, will be required, according to leading climatologist James Hansen.[3](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en3) Hansen’s strategy, however, like most others, remains based on the current system, that is, it excludes the possibility of a full-scale ecological revolution, involving the self-mobilization of the population around production and consumption. What remains certain is that any attempt to implement geoengineering (even in the form of technological schemes for carbon removal) as the dominant strategy for addressing global warming, subordinated to the ends of capital accumulation, would prove fatal to humanity. The costs of such action, the burden it would put on future generations, and the dangers to living species, including our own, are so great that the only rational course is a long ecological revolution aimed at the most rapid possible reduction in carbon dioxide and other greenhouse gas emissions, coupled with an emphasis on agroecology and restoration of global ecosystems, including forests, to absorb carbon dioxide.[4](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en4) This would need to be accompanied by a far-reaching reconstitution of society at large, aimed at the reinstitution on a higher level of collective and egalitarian practices that were undermined by the rise of capitalism. Geoengineering the Planet Under the Regime of Fossil Capital Geoengineering as an idea dates back to the period of the first discoveries of rapid anthropogenic climate change. Beginning in the early 1960s, the Soviet Union’s (and at that time the world’s) leading climatologist, Mikhail Budyko, was the first to issue a number of warnings on the inevitably of accelerated global climate change in the case of industrial systems based on the burning of fossil fuels.[5](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en5) Although anthropogenic climate change had long been recognized, what was new was the discovery of major climate feedbacks such as the melting of Arctic ice and the disruption of the albedo effect as reflective white ice was replaced with blue seawater, increasing the amount of solar radiation absorbed by the planet and ratcheting up global average temperature. In 1974, Budyko offered, as a possible solution to climate change, the use of high-flying planes to release sulfur particles (forming sulfate aerosols) into the stratosphere. This was meant to mimic the role played by volcanic action in propelling sulfur into the atmosphere, thus creating a partial barrier, limiting incoming solar radiation. **The rationale he offered was that capitalist economies, in particular, would not be able to curtail capital-accumulation-based growth, energy use, and emissions, despite the danger to the climate**.[6](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en6) Consequently, technological alternatives to stabilize the climate would have to be explored. But it was not until 1977 when the Italian physicist Cesare Marchetti proposed a scheme for capturing carbon dioxide emissions from electrical power plants and using pipes to sequester them in the ocean depths that the word “geoengineering” itself was to appear.[7](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en7) Budyko’s pioneering proposal to use sulfur particles to block a part of the sun’s rays, now known as “stratospheric aerosol injection,” and Marchetti’s early notion of capturing and sequestering carbon in the ocean, stand for the two main general approaches to geoengineering—respectively, solar radiation management (SRM) and carbon dioxide removal (CDR). SRM is designed to limit the solar radiation reaching the earth. CDR seeks to capture and remove carbon to decrease the amount entering the atmosphere. Besides stratospheric aerosol injection, first proposed by Budyko, another approach to SRM that has gained influential adherents in recent years is marine cloud brightening. This would involve cooling the earth by modifying low-lying, stratocumulus clouds covering around a third of the ocean, making them more reflective. In the standard scenario, a special fleet of 1,500 unmanned, satellite-controlled ships would roam the ocean spraying submicron drops of seawater in the air, which would evaporate leaving salty residues. These bright salt particles would reflect incoming solar radiation. They would also act as cloud condensation nuclei, increasing the surface area of the clouds, with the result that more solar radiation would be reflected. Both stratospheric aerosol injection and marine cloud brightening are widely criticized as posing enormous hazards on top of climate change itself, while simply addressing the symptoms not the cause of climate change. Stratospheric aerosol injection—to be delivered to the stratosphere by means of hoses, cannons, balloons, or planes—would alter the global hydrological cycle with enormous unpredictable effects, likely leading to massive droughts in major regions of the planet. It is feared that it could shut down the Indian monsoon system disrupting agriculture for as many as 2 billion people.[8](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en8) There are also worries that it might affect photosynthesis and crop production over much of the globe.[9](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en9) The injection of sulfur particles into the atmosphere could contribute to depletion of the ozone layer.[10](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en10) Much of the extra sulfur would end up dropping to the earth, leading to acid rain.[11](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en11) **Most worrisome of all, stratospheric aerosol injection would have to be repeated year after year. At termination the rise in temperature associated with additional carbon buildup would come almost at once with world temperature conceivably rising by 2–3°C in a decade—a phenomenon referred to as the “termination problem.”**[12](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en12) As with stratospheric aerosol injection, **marine cloud brightening would drastically affect the hydrological cycle in unpredictable ways**. For example, it could generate a severe drought in the Amazon, drying up the world’s most vital terrestrial ecosystem with incalculable and catastrophic effects for Earth System stability.[13](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en13) Many of the dangers of cloud brightening are similar to those of stratospheric aerosol depletion. Like other forms of SRM, it would do nothing to stop ocean acidification caused by rising carbon dioxide levels. The first form of CDR to attract significant attention from economic interests and investors was the idea of fertilizing the ocean with iron, thereby boosting the growth of phytoplankton so as to promote greater ocean uptake of carbon. There have been a dozen experiments in this area and the difficulties attending this scheme have proven to be legion. The effects on the ecological cycles of phytoplankton, zooplankton, and a host of other marine species all the way up to whales at the top of the food chain are indeterminate. Although some parts of the ocean would become greener due to the additional iron, other parts would become bluer, more devoid of life, because they would be deprived of the nutrients—nitrate, phosphorus, and silica—needed for growth.[14](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en14) Evidence suggests that the vast portion of the carbon taken in by the ocean would stay on the surface or the intermediate levels of the ocean, with only a tiny part entering the ocean depths, where it would be naturally sequestered.[15](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en15) Among the various CDR schemas, it is BECCS, because of its promise of negative emissions, which today is attracting the most support. This is because it seems to allow nations to overshoot climate targets on the basis that the carbon can be removed from the atmosphere decades later. Although BECCS exists at present largely as an untested computer model, it is now incorporated into almost all climate models utilized by the IPCC.[16](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en16) As modeled, **BECCS would burn cultivated crops in order to generate electricity, with the capture and underground storage of the resulting carbon dioxide. In theory, since plant crops can be seen as carbon neutral—taking carbon dioxide from the atmosphere and then eventually releasing it again—BECCS, by burning biomass and then capturing and sequestering the resulting carbon emissions, would be a means of generating electricity while at the same time resulting in a net reduction of atmospheric carbon. BECCS, however, comes into question the moment one moves from the abstract to the concrete.** The IPCC’s median-level models are projected to remove 630 gigatons of carbon dioxide from the atmosphere, around two thirds of the total emitted between the Industrial Revolution and 2011.[17](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en17) This would occur on vast crop plantations to be run by agribusiness. **To remove a trillion tons of carbon dioxide from the atmosphere as envisioned in the more ambitious scenarios would take up a land twice the size of India (or equal to Australia), about half as much land as currently farmed globally, requiring a supply of freshwater equal to current total global agricultural usage.**[18](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en18) The costs of implementing BECCS on the imagined scales have been estimated by climatologist James Hansen—who critically notes that negative emissions have “spread like a cancer” in the IPCC climate models—to be on the order of hundreds of trillions of dollars, with “minimal estimated costs” ranging as high as $570 trillion this century.[19](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en19) The effects of BECCS—used as a primary mechanism and designed to avoid confrontation with the present system of production—would therefore be a massive displacement of small farmers and global food production. Moreover, the notion that the forms of large-scale, commercial agricultural production presumed in BECCS models would be carbon neutral and would thus result in negative emissions with sequestration has been shown to be exaggerated or false when the larger effects on global land use are taken into account. BECCS crop cultivation is expected to take place on vast monoculture plantations, displacing other forms of land use. Yet, biologically diverse ecosystems have substantially higher rates of carbon sequestration in soil and biomass than does monocrop agriculture.[20](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en20) An alternative to BECCS in promoting carbon sequestration would be to promote massive, planetary ecological restoration, including reforestation, together with the promotion of agroecology modeled on traditional forms of agriculture organized around nutrient recycling and improved soil management methods.[21](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en21)This would avoid the metabolic rift associated with agribusiness monocultures, which are less efficient both in terms of food production per hectare and carbon sequestration. Another commonly advocated technofix, carbon capture and sequestration (CCS), is not strictly a form of geoengineering since it is directed at capturing and sequestering carbon emissions of particular electrical plants, such as coal-fired power plants. However, **the promotion of a CCS infrastructure on a planetary scale as a means of addressing climate change—thereby skirting the necessity of an ecological revolution in production and consumption—is best seen as a form of planetary geoengineering due to its immense projected economic and ecological scale**. Although CCS would theoretically allow the burning of fossil fuels from electrical power plants with no carbon emissions into the atmosphere, **the scale and the costs of CCS operations are prohibitive.** As Clive Hamilton writes in Earthmasters: The Dawn of the Age of Climate Engineering, CCS for a single “standard-sized 1,000 megawatt coal-fired plant….would need 30 kilometers of air-sucking machinery and six chemical plants, with a footprint of 6 square kilometers.”[22](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en22) Energy expert Vaclav Smil has calculated that, “in order to sequester just a fifth of current [2010] CO2 emissions we would have to create an entirely new worldwide absorption-gathering-compression-transportation-storage industry whose annual throughput would have to be about 70 percent larger than the annual volume now handled by the global crude oil industry, whose immense infrastructure of wells, pipelines, compressor stations and storage took generations to build.”[23](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en23) **Capturing and sequestering current U.S. carbon dioxide emissions would require 130 billion tons of water per year, equal to about half the annual flow of the Columbia River. This new gigantic infrastructure would be placed on top of the current fossil fuel infrastructure—all in order to allow for the continued burning of fossil fuels**.[24](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en24) A Planetary Precautionary Principle for the Anthropocene If today’s planetary ecological emergency is a product of centuries of war on the planet as a mechanism of capital accumulation, fossil-capital generated geoengineering schemes can be seen as gargantuan projects for keeping the system going by carrying this war to its ultimate level. Geoengineering under the present regime of accumulation has the sole objective of keeping the status quo intact—neither disturbing the dominant relations of capitalist production nor even seeking so much as to overturn the fossil-fuel industry with which capital is deeply intertwined. Profits, production, and overcoming energy poverty in the poorer parts of the world thus become justifications for keeping the present fossil-capital system going, maintaining at all cost the existing capitalist environmental regime. The Promethean mentality behind this is well captured by a question that Rex Tillerson then CEO of Exxon Mobil Corporation asked—without a trace of irony—at an annual shareholders meeting in 2013: “What good is it to save the planet if humanity suffers?”[25](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en25) The whole history of ecological crisis leading up the present planetary emergency, punctuated by numerous disasters—from the near total destruction of the ozone layer, to nutrient loading and the spread of dead zones in the ocean, to climate change itself—serves to highlight the march of folly associated with any attempt to engineer the entire planet. The complexity of the Earth System guarantees that enormous unforeseen consequences would emerge. As Frederick Engels warned in the nineteenth century, “Let us not…flatter ourselves overmuch on account of our human victories over nature. For each such victory nature takes its revenge on us. Each victory, it is true, in the first place brings about the results we expected, but in the second and third places it has quite different, unforeseen effects which only too often cancel the first.”[26](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en26) In the face of uncertainty, coupled with an extremely high likelihood of inflicting incalculable harm on the Earth System, it is essential to invoke what is known as the Precautionary Principle whenever the question of planetary geoengineering is raised. As ecological economist Paul Burkett has explained, the strong version of the Precautionary Principle, necessarily encompasses the following: (1) The Precautionary Principle Proper, which says that if an action may cause serious harm, there is a case for counteracting measures to ensure that the action does not take place. (2) The Principle of Reverse Onus, under which it is the responsibility of those supporting an action to show that it is not seriously harmful, thereby shifting the burden of proof off those potentially harmed by the action (e.g. the general population and other species occupying the environment). In short, it is safety, rather than potential harm, that needs to be demonstrated. (3) The Principle of Alternative Assessment, stipulating that no potentially harmful action will be undertaken if there are alternative actions available that safely achieve the same goals as the action proposed. (4) All societal deliberations bearing on the application of features 1 through 3 must be open, informed, and democratic, and must include all affected parties.[27](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en27) It is clear that geoengineering promoted in a context of a capitalist regime of maximum accumulation would be ruled out completely by a strong Precautionary Principle based on each of the criteria listed above. There is a near certainty of extreme damage to the human species as a whole arising from all of the major geoengineering proposals. If the onus were placed on status quo proponents of capitalist geoengineering to demonstrate that great harm to the planet as a place of human habitation would not be inflicted, such proposals would fail the test. Since the alternative of not burning fossil fuels and promoting alternative forms of energy is entirely feasible, while planetary geoengineering carries with it immense added dangers for the Earth System as a whole, such a technofix as a primary means of checking global warming would be excluded by that criterion, too. Finally, geoengineering under the present economic and social system invariably involves some entity from the power structure—a single multi-billionaire, a corporation, a government, or an international organization—implementing such action ostensibly on behalf of humanity as a whole, while leaving most affected parties worldwide out of the decision-making process, with hundreds of millions, perhaps billions, of people paying the environmental costs, often with their lives. In short, geoengineering, particularly if subordinated to the capital accumulation process, violates the most sacred version of the Precautionary Principle, dating back to antiquity: First Do No Harm. Eco-Revolution as the Only Alternative As an extension of the current war on the planet, a regime of climate geoengineering designed to keep the present mode of production going is sharply opposed to the view enunciated by Barry Commoner in 1992 in Making Peace with the Planet, where he wrote: “If the environment is polluted and the economy is sick, the virus that causes both will be found in the system of production.”[28](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en28) There can be no doubt today that it is the present mode of production, particularly the system of fossil capital, that needs to change on a global scale. In order to stop climate change, the world economy must quickly shift to zero net carbon dioxide emissions. This is well within reach with a concerted effort by human society as a whole utilizing already existing sustainable technological means—particularly when coupled with necessary changes in social organization to reduce the colossal waste of resources and lives that is built into the current alienated system of production. Such changes could not simply be implemented from the top by elites, but rather would require the self-mobilization of the population, inspired by the revolutionary actions of youth aimed at egalitarian, ecological, collective, and socialized solutions—recognizing that it is the world that they will inherit that is most at stake. Today’s necessary ecological revolution would include for starters: (1) an emergency moratorium on economic growth in the rich countries coupled with downward redistribution of income and wealth; (2) radical reductions in greenhouse gas emissions; (3) rapid phase-out of the entire fossil fuel energy structure; (4) substitution of an alternative energy infrastructure based on sustainable alternatives such as solar and wind power and rooted in local control; (5) massive cuts in military spending with the freed-up economic surplus to be used for ecological conversion; (6) promotion of circular economies and zero-waste systems to decrease the throughput of energy and resources; (7) building effective public transportation, together with measures to decrease dependence on the private automobile; (8) restoration of global ecosystems in line with local, including indigenous, communities; (9) transformation of destructive, energy-and chemical-intensive agribusiness-monocultural production into agroecology, based on sustainable small farms and peasant cultivation with their greater productivity of food per acre; (10) institution of strong controls on the emission of toxic chemicals; (11) prohibition of the privatization of freshwater resources; (12) imposition of strong, human-community-based management of the ocean commons geared to sustainability; (13) institution of dramatic new measures to protect endangered species; (14) strict limits imposed on excessive and destructive consumer marketing by corporations; (15) reorganization of production to break down current commodity chains geared to rapacious accumulation and the philosophy of après moi le déluge; and (16) the development of more rational, equitable, less wasteful, and more collective forms of production.[29](https://monthlyreview.org/2018/09/01/making-war-on-the-planet/#en29) Priority in such an eco-revolution would need to be given to the fastest imaginable elimination of fossil fuel emissions, but this would in turn require fundamental changes in the human relationship to the earth and in the relationship of human beings to each other. A new emphasis would have to be placed on sustainable human development and the creation of an organic system of social metabolic reproduction. Centuries of exploitation and expropriation, including divisions on the basis of class, gender, race, and ethnicity, would have to be transcended. The historical logic posed by current conditions thus points to the necessity of a long ecological revolution, putting into place a new system of sustainable human development aimed at addressing the totality of needs of human beings as both natural and social beings: what is now called ecosocialism.

#### Endorse a dictatorship of the proletariat. Global capitalism’s inequities can only be fully purged once its intrinsic contradictions expose themselves. A dictatorship is required to solidify our transition to communism and is why you should reject any perm that attempts to preserve the state apparatus.

Revolution 73 Proletarian Dictatorship Vs. Bourgeois “Democracy”; Encyclopedia of Anti-Revisionism On-Line; Revolution; May 1973; Edited by Paul Saba; <https://www.marxists.org/history/erol/ncm-1/pd-v-bd.htm>; CE recut amrita

This situation can only be reversed by socialist revolution to overthrow capitalist rule. The first task of this revolution is to smash the power of the bourgeois state through the armed might of the workers and their allies. The bourgeoisie and its armed forces are disarmed. The political structure and the courts and bureaucracies of the bourgeois state–and all its rules and regulations aimed at enslaving the people–are abolished. Once in power the working class moves to socialize the ownership of the means of production-making them the common property of society–to resolve the basic contradiction of capitalism, to break down the obstacles capitalism puts in the way of progress, and makes possible the rapid development of society. Socialism is a higher form of society than capitalism, and is bound to replace it all over the world, just as capitalism replaced the feudal system of landlords and serfs. In the process of socialist revolution the working class and its allies builds up their own state machine, the dictatorship of the proletariat. Workers are armed and organized into people’s militias and armed forces. The capitalists and their enforcers are punished for their crimes against the people. This dictatorship imposed by the working class on the former exploiters and over new capitalist elements who arise under socialism is absolutely necessary in order to crush their resistance and prevent them from wrecking socialism and restoring their rule. Although this country’s capitalists like to point to the Soviet Union today and say, “This is what communism means,” the dictatorship of the proletariat is not what exists in the Soviet Union today. The working class was once in power in the Soviet Union and was building a powerful socialist society which was the bright hope of workers around the world. But the capitalist class was able to stage a comeback, when a new bourgeoisie seized power in the mid-’50s and turned the Soviet Union back from a socialist country to a capitalist country. Today the Soviet Union, as well as Cuba and most Eastern European countries under its thumb, are examples of bourgeois dictatorships. They disguise themselves as socialist countries where the working class rules, but in reality a new capitalist class rules and enforces its strict dictatorship over the working class. The dramatic events in China since the death of Mao Tsetung and the arrest of those most closely associated with him are signs of the fact that a new bourgeoisie has seized the reins in China and is attempting to steer this country, too, down the capitalist road. The dictatorship of the proletariat is qualitatively different from the bourgeois state that exists in the U.S. and the Soviet Union and other capitalist countries. Its purpose is not to enforce exploitation and the rule of a tiny minority. The proletarian state for the first time in history means the rule of the majority, the working class, allied with all of the oppressed. At the same time that there is a dictatorship over the former capitalist exploiters there is the unparalleled extension of real democracy for those oppressed by capitalism–the working people. The proletarian state is a million times more democratic than even the most democratic capitalist state. No longer do a handful of parasites run society for their own private profit and the working class sets out to transform all of society. To accomplish this the government is set up and run by workers, and the press, television stations, schools, etc., which the capitalists use to mold public opinion and shore up their rule, are stripped from them and become the common property of the working class and the masses of people. Since the working class and the socialist society built under its leadership represent the interests of the great majority of society, the workers openly proclaim their rule and openly dictate to their former exploiters and tormentors. The rule of the working class cannot be exercised by deceiving the masses of people, but only by their active involvement in every part of the political life of society and raising their political consciousness. But socialism is not a Utopia. It replaces capitalism, but cannot do away in one stroke with the inequalities, the old selfish ideas and the remnants of capitalism. Socialism itself is only the lower stage and transition to a still higher form of society, communism, where there will no longer be any classes, and, therefore, there will no longer be any need for the dictatorship of the proletariat. During this entire transition period, the working class must maintain and strengthen its rule over the former exploiters and the new bourgeois elements that arise under socialism, prevent them from subverting the new society and restoring the old, and overcome the remaining influences of their dog-eat-dog, “look out for number one” philosophy. When everyone in society can share equally in mental and manual work, in producing goods and services and managing the affairs of society; when the outlook of the working class, putting the common good above narrow, individual interests, has become “second nature” to members of society; when goods and services can be produced so abundantly that money is no longer needed to exchange them and they can be distributed to people solely according to their needs; then society will have reached the stage of communism. Classes will have been completely eliminated, and the state as such will be replaced by the common administration of society by all its members. As this happens, throughout the world, mankind will have scaled a great mountain and will look out on a whole new horizon. The experience of the socialist countries, the Soviet Union under the leadership of Lenin and Stalin and the People’s Republic of China during the lifetime of Mao Tsetung, has shown that the working class can overthrow the exploiters and run society in the interests of the masses of people. The fact that the rule of the working class was overthrown in the Soviet Union and now temporarily in China also shows how stubborn the class struggle is under socialism and the need for the proletarian dictatorship to be maintained. Communism will show that the people can do away completely and forever with the institutions and influences of capitalism and all other forms of class society. Karl Marx, founder of communist philosophy and of the revolutionary workers movement, wrote, “The existence of classes is only bound up with particular phases in the development of production . . . the class struggle necessarily leads to the dictatorship of the proletariat. . . [and] this dictatorship itself only constitutes the transition to the abolition of classes and to a classless society. ”

### Case

#### We dn’t need to check everything in CX – 1] infinitely regressive – their model justifies checking CP solvency etc during CX which makes no sense 2] Key to neg flex – we have to test the aff from all angles.

#### 1AR theory is bad and is irresolvable – their responses to my counter interp will always be new which makes you have to flip a coin to decide who wins. Worst case it’s just drop the arg. Don’t punish us for potential nc abuse

Case proper

#### They don’t control uniqueness – the PFAD evidence says that there are drugs related to ones on the market, not that there aren’t improvements in each iteration of the drug

#### Evergreening is just good – on things like insulin, epi pens and stuff wouldn’t exist without evergreening oops

#### **No existnetial threats – their James evidence is godawful and doesn’t explain why there will be extinction – read it post round**

#### **Competitors are allowed to produce generic versions of patented drugs**

Lietzan 20

Erika Lietzan [Law professor at the University of Missouri School of Law, where she researches, writes, and teaches primarily in the areas of FDA regulation, intellectual property, and administrative law], 2020 Fall, “https://www.cato.org/regulation/fall-2020/evergreening-myth”, <https://www.cato.org/regulation/fall-2020/evergreening-myth#three-myths-evergreening> // AK

Myth of blocked competitors / The second myth is that when an innovator holds patents that expire after its active ingredient patent, or when it introduces newer products to market, it can prevent its competitors from bringing their copies to market. Instead, once the initial patent and (if applicable) statutory exclusivity on the innovator’s active ingredient have expired, its competitors have substantial freedom to operate. This freedom reflects two facts that are often overlooked. First, the innovator’s competitor does not have to propose an exact copy. Federal law permits the competitor to rely on the innovator’s research but propose competing products that are not identical. To be sure, a competitor may submit an ANDA for a product that essentially duplicates the innovator’s product — that is, a generic. Ordinarily, the company shows in the ANDA that its product has the same active ingredient, route of administration, dosage form, strength, and labeling as the innovator’s product. The generic must also be “bioequivalent” to the original drug that it references, meaning that its active ingredient must reach the site of action in the body to the same extent and at the same rate as the active ingredient of the referenced product. But even a generic can be a little different. For example, it usually does not need the same inactive ingredients in the same quantities. And the generic competitor need not use the same manufacturing process. If a competitor wants to offer a different route of administration, dosage form, or strength — for instance, to avoid infringing a patent — it may still be able to use the generic drug approval pathway. It simply files a “suitability petition” asking the FDA’s permission. The agency will approve the petition unless more data are needed to establish the proposed product’s safety and effectiveness. And at this point, the competitor may file an ANDA. More significantly, though, a competitor can always use a different abbreviated application pathway: a “505(b)(2)” application for a product that differs more substantially from the innovator’s product. Although the changes proposed in this hybrid application must be supported by new data, the competitor otherwise relies on the innovator’s data, avoiding the expensive and time‐​consuming research and development process the innovator went through. In addition to using this mechanism to propose modifications that avoid a patent, a competitor might use the mechanism to propose innovations that will offer an advantage in the market — such as changes to the active ingredient and new medical uses. Second, an abbreviated application cites a specific innovative product, not the active ingredient or brand writ large. The competitor selects one innovative product as the reference product on which it relies — for instance, one of the 12 products in the hypothetical above. Its regulatory burden is tied to that specific product alone. The requirement to show sameness and bioequivalence (for an ANDA) and, critically, the obligation to contend with patents and wait for statutory exclusivity to expire are linked to the one specific product, alone. (In rare circumstances, when filing a hybrid application, a competitor might cite two innovative products, but the same point applies.) To be sure, the patents associated with the cited innovative product affect when the FDA may approve the abbreviated application. Whether it files an ANDA or a hybrid application, a competitor must address the unexpired patents listed in the FDA’s “Orange Book” for the specific innovative product it has chosen to cite. For each listed patent, it has two choices, and its selection dictates the timing of FDA approval as far as that patent is concerned. The competitor may state the date on which the patent will expire, signaling that it does not plan to market its product until expiry. This precludes final approval of its product until patent expiry. Or it may assert that the patent is invalid or will not be infringed by its product, notifying the innovator of this position. If the innovator sues within 45 days, the drug statute stays final approval of its abbreviated application for 30 months. Under changes to the law made in 2003, though, unless the competitor changes its position on a patent after filing its abbreviated application, approval of its application is stayed only once. At the end of the 30 months, the FDA must approve the abbreviated application if the approval standard is met, even if there is ongoing patent litigation. Although a competitor using the abbreviated application pathway must contend with the innovator’s patents and approval of its product may be delayed because of those patents, this is true of only the patents associated with the specific product that it references. The competitor does not have to contend with patents associated with other products that happen to contain the same active ingredient or bear the same brand name. Similarly, the competing applicant grapples with only the statutory exclusivity associated with the product it references. The drug statute provides five years of exclusivity in the data supporting new chemical entities and three years of exclusivity for most new products that are not new chemical entities. Separately, if an innovator introduces what the FDA calls a new “condition of approval” — such as a new strength or dosage form — the drug statute may provide three years of exclusivity. This delays approval of abbreviated applications proposing products with the same active ingredient for the same condition of approval. But a competitor that proposed a different strength or dosage form — or that cited a product with a different strength or dosage form (such as the innovator’s original product) — would not need to grapple with that exclusivity. This debunks the myth that an innovator with later‐​expiring patents and an innovator that introduces newer products can prevent its competitors from bringing copies to market. Instead, competitors have several options. For instance, empirical studies show that competitors file abbreviated applications as early as the law permits them to do so, arguing that the innovator’s patents are invalid or, if applicable, not infringed by the new drug. They tend to lose these arguments when the active ingredient patent is at issue, but they tend to win if a formulation patent is at issue. If a competitor believed it would infringe a patent or feared it would lose the patent infringement suit brought by the innovator, it could seek a license. Settlements of patent litigation between innovators and competitors seeking to market generic copies usually include a license allowing the competitor to bring its product to market earlier than the date of patent expiry. There are also other options. Once the patent on the active ingredient expires, a competitor can use the ingredient in its own product and file an abbreviated application, relying on the research performed and submitted by the innovator. Even in an ANDA, a true generic application, only the active ingredient must be the same. A competitor may be able to design around patents claiming other aspects of the innovator’s product (such as its strength and route of administration) and still file a true generic application. The competitor would simply file a suitability petition and, upon approval of that petition, a generic application proposing the difference that allowed it to avoid patent infringement. Then it would assert non‐​infringement in its application. If it could not file a generic application (for instance, because the FDA requested data to support the changes made), it could always file a hybrid application. It would still rely on the innovator’s research and it would similarly assert non‐​infringement in its application. In either case, the innovator might not sue if the competitor clearly avoided its patents. It is thus misleading for advocates of intervention to complain about the number of “patents” associated with a “drug.” A competitor filing an abbreviated application does not copy a “drug” in the broad sense of the term. Accurately describing a company’s freedom to operate in the market would require focusing on discrete products that can serve as references for abbreviated applications and on the number, scope, and breadth of the patent claims held by the innovator for those products. This would tell policymakers more about the market effects of a firm’s innovation and patenting practices than the number of patents associated with a particular brand name or the number of patents associated with the many finished products containing a particular active ingredient.

#### Reductions in protections kill medical innovation, economic growth, and knowledge building for the future – negative turns are Goldlocks – they explain that the aff is just wrong – we have the most qualled authors

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Innovation can—and does—happen anywhere and at any time. As society ground to a halt in 2020, innovators around the world worked tirelessly to develop treatments, vaccines, and solutions to COVID-19 pandemic-related challenges. From personal protective equipment (PPE) to treatments and vaccines to autonomous delivery robots to remote and social distancing solutions for the workplace, intellectual property (IP) played an indispensable role in enabling research, development, and commercialization of many of the innovations meeting the challenges of the pandemic. IP enables start-ups to gain access to much-needed capital. IP gives innovators the confidence to invest in research and development (R&D) and provides incentives for commercialization. Indeed, it is difficult to innovate without the protection of ideas.

Despite this, some—particularly anti-business IP opponents—have blamed IP rights for a host of problems, including limited access to therapeutics, vaccines, and biotechnology. They offer seemingly simple solutions—weaken or eliminate IP rights—and innovation will flow like manna from heaven. Eliminating IP rights might accelerate the diffusion of some pre-existing innovations, but it would absolutely limit future innovations. Innovators, a bit like Charlie Brown kicking the football held by Lucy, would be wary of trusting governments who might say, “Well, this time we won’t take away your IP rights, so go ahead and invest large amounts of time and money.” Given the nature of COVID-19, nations around the world cannot afford to take this risk. Future pandemics and other challenges for which we will need to rely on IP-protected innovations to overcome are near certain to arise.

Moreover, the blame game usually ignores the real, underlying problems. For access to innovations to fight COVID-19, especially biotechnology, vaccines, and therapeutics, the underlying problems are regulatory delays and a lack of adequate and appropriate manufacturing infrastructure.1 The lack of infrastructure has resulted in supply chain bottlenecks in places where few are currently equipped to handle the manufacturing requirements.2 Meanwhile, regulatory delays have prevented vaccines, therapeutics, and diagnostics from entering certain markets.3

To better understand the role of IP in enabling solutions related to COVID-19 challenges, this report relies on 10 case studies drawn from a variety of nations, technical fields, and firm sizes. This is but a handful of the thousands of IP-enabled innovations that have sprung forth over the past year in an effort to meet the tremendous challenges brought on by COVID-19 globally. From a paramedic in Mexico to a veteran vaccine manufacturing company in India and a tech start-up in Estonia to a U.S.-based company offering workplace Internet of Things (IoT) services, small and large organizations alike are working to combat the pandemic. Some have adapted existing innovations, while others have developed novel solutions. All are working to take the world out of the pandemic and into the future.

The case studies are:

Bharat Biotech: Covaxin

Gilead: Remdesivir

LumiraDX: SARS-COV-2 Antigen POC Test

Teal Bio: Teal Bio Respirator

XE Ingeniería Médica: CápsulaXE

Surgical Theater: Precision VR

Tombot: Jennie

Starship Technologies: Autonomous Delivery Robots

Triax Technologies: Proximity Trace

Zoom: Video Conferencing

As the case studies show, IP is critical to enabling innovation. Policymakers around the world need to ensure robust IP protections are—and remain—in place if they wish their citizens to have safe and innovative solutions to health care, workplace, and societal challenges in the future.

THE ROLE OF INTELLECTUAL PROPERTY IN R&D-INTENSIVE INDUSTRIES

Intangible assets, such as IP rights, comprised approximately 84 percent of the corporate value of S&P 500 companies in 2018.4 For start-ups, this means much of the capital needed to operate is directly related to IP (see Teal Bio case study for more on this). IP also plays an especially important role for R&D-intensive industries.5

To take the example of the biopharmaceutical industry, it is characterized by high-risk, time-consuming, and expensive processes including basic research, drug discovery, pre-clinical trials, three stages of human clinical trials, regulatory review, and post-approval research and safety monitoring. The drug development process spans an average of 11.5 to 15 years.6 For every 5,000 to 10,000 compounds screened on average during the basic research and drug discovery phases, approximately 250 molecular compounds, or 2.5 to 5 percent, make it to preclinical testing. Out of those 250 molecular compounds, approximately 5 make it to clinical testing. That is, 0.05 to 0.1 percent of drugs make it from basic research into clinical trials. Of those rare few which make it to clinical testing, less than 12 percent are ultimately approved for use by the U.S. Food and Drug Administration (FDA).7

In addition to high risks, drug development is costly, and the expenses associated with it are increasing. A 2019 report by the Deloitte Center for Health Solutions concluded that since 2010 the average cost of bringing a new drug to market increased by 67 percent.8 Numerous studies have examined the substantial cost of biopharmaceutical R&D, and most confirm investing in new drug development requires $1.7 billion to $3.2 billion up front on average.9 A 2018 study by the Coalition for Epidemic Preparedness found similar risks and figures for vaccines, stating, “In general, vaccine development from discovery to licensure can cost billions of dollars, can take over 10 years to complete, and has an average 94 percent chance of failure.”10 Yet, a 2010 study found that 80 percent of new drugs—that is, the less than 12 percent ultimately approved by the FDA—made less than their capitalized R&D costs.11 Another study found that only 1 percent (maybe three new drugs each year) of the most successful 10 percent of FDA approved drugs generate half of the profits of the entire drug industry.12

To say the least, biopharmaceutical R&D represents a high-stakes, long-term endeavor with precarious returns. Without IP protection, biopharmaceutical manufacturers have little incentive to take the risks necessary to engage in the R&D process because they would be unable to recoup even a fraction of the costs incurred. Diminished revenues also result in reduced investments in R&D which means less research into cancer drugs, Alzheimer cures, vaccines, and more. IP rights give life-sciences enterprises the confidence needed to undertake the difficult, risky, and expensive process of life-sciences innovation secure in the knowledge they can capture a share of the gains from their innovations, which is indispensable not only to recouping the up-front R&D costs of a given drug, but which can generate sufficient profits to enable investment in future generations of biomedical innovation and thus perpetuate the enterprises into the future.13

#### solveInfectious diseases don’t cause extinction

Owen Cotton-Barratt 17, et al, 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

#### Evergreening allows for increased accessibility of medicines

Chris Holman, Febuary 7, 2020, "Why Pharmaceutical Follow-On Innovation Should Be Eligible For Patent Protection," Geneva Network, <https://geneva-network.com/research/why-pharmaceutical-follow-on-innovation-should-be-eligible-for-patent-protection/> //PHS AS

Inside View: Why Pharmaceutical Follow-On Innovation Should Be Eligible For Patent Protection By [Christopher M. Holman](https://cpip.gmu.edu/about/our-team/chris-holman/)\* Despite the important role of intellectual property rights in incentivizing innovation, the patenting of pharmaceutical innovation is frequently accused of impeding access to medicine. Criticism o f the prevailing patent regime has focused in particular on patents directed towards follow-on innovation, i.e., innovation that seeks to improve upon existing pharmaceuticals and their use in treating patients. Patents on follow-on innovation are often derided as “secondary” patents, with the implication that the underlying inventions are somehow lesser in nature than the subject matter claimed in “primary” patents, i.e., the drug active ingredient per se. While implicitly acknowledging the legitimacy of primary patents, critics of so-called secondary patents contend that patents on follow-on innovation allow drug innovators to “evergreen” their products, i.e., to extend the period of patent exclusivity beyond the expiration of any original patent on the drug active ingredient, and in doing so contribute to the high cost of drugs, thereby limiting the ability of patients to access the drugs upon which they have come to rely. In 2015, the United Nations Development Programme (UNDP) issued a document entitled [Guidelines for Pharmaceutical Patent Examination: Examining Pharmaceutical Patents from a Public Health Perspective](http://www.undp.org/content/dam/undp/library/HIV-AIDS/UNDP_patents_final_web_2.pdf) (the “Guidelines”), which, in an effort to promote access to medicines, recommends that courts and patent offices implement newly heightened patentability requirements for follow-on pharmaceutical innovation that would be uniquely stringent and largely unprecedented. [1](https://geneva-network.com/article/follow-on-innovation/#note-3156-1) In 2017, I challenged many of the assertions made in the Guidelines in an article entitled [In Defense of Secondary Pharmaceutical Patents: A Response to the UN’s Guidelines for Pharmaceutical Patent Examination (“Defense of Secondary Patents”)](https://mckinneylaw.iu.edu/ilr/pdf/vol50p759.pdf), which provides numerous examples of so-called secondary patents that have withstood validity challenges in the courts and patent offices throughout the world and which were directed towards follow-on pharmaceutical innovation clearly meriting patent protection. [2](https://geneva-network.com/article/follow-on-innovation/#note-3156-2) More recently, I teamed up with legal scholars Timo Minssen and Eric Solovy in authoring [Patentability Standards for Follow-on Pharmaceutical Innovation (“Patentability Standards”)](https://www.liebertpub.com/doi/abs/10.1089/blr.2018.29073.cmh), an article that reiterates the important role of follow-on pharmaceutical innovation in addressing compelling human health concerns, and which proposes what we consider to be the appropriate standards and criteria to be applied in assessing the patentability of this sometimes underappreciated aspect of medical innovation. [3](https://geneva-network.com/article/follow-on-innovation/#note-3156-3)

#### High Checks and Balances on Evergreening – Squo Solves

Chris Holman, Febuary 7, 2020, "Why Pharmaceutical Follow-On Innovation Should Be Eligible For Patent Protection," Geneva Network, <https://geneva-network.com/research/why-pharmaceutical-follow-on-innovation-should-be-eligible-for-patent-protection/> //PHS AS

Utility / Industrial Application The requirement of utility/industrial application likewise should generally not be an issue for follow-on pharmaceutical innovation, since by their nature these inventions involve a new form or mode of use of a pharmaceutically active chemical entity of known therapeutic potential. It is important to emphasize that compliance with the utility requirement does not require a showing that the follow-on invention provide some beneficial utility not otherwise provided by the prior art. If a follow-on pharmaceutical invention does not provide any significant benefit over the prior state-of-the-art, regulatory authorities and a well-functioning market should ensure that the patent will not significantly impact access to medicine.