## 1

#### Interpretation: “medicines” is a generic bare plural. The aff may not defend that member nations of the World Trade Organization ought to reduce intellectual property protections for a medicine or subset of medicines.

Nebel 19. [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs. He writes a lot of this stuff lol – duh.] “Genericity on the Standardized Tests Resolution.” Vbriefly. August 12, 2019. <https://www.vbriefly.com/2019/08/12/genericity-on-the-standardized-tests-resolution/?fbclid=IwAR0hUkKdDzHWrNeqEVI7m59pwsnmqLl490n4uRLQTe7bWmWDO_avWCNzi14> TG

Both distinctions are important. Generic resolutions can’t be affirmed by specifying particular instances. But, since generics tolerate exceptions, plan-inclusive counterplans (PICs) do not negate generic resolutions.

Bare plurals are typically used to express generic generalizations. But there are two important things to keep in mind. First, generic generalizations are also often expressed via other means (e.g., definite singulars, indefinite singulars, and bare singulars). Second, and more importantly for present purposes, bare plurals can also be used to express existential generalizations. For example, “Birds are singing outside my window” is true just in case there are some birds singing outside my window; it doesn’t require birds in general to be singing outside my window.

So, what about “colleges and universities,” “standardized tests,” and “undergraduate admissions decisions”? Are they generic or existential bare plurals? On other topics I have taken great pains to point out that their bare plurals are generic—because, well, they are. On this topic, though, I think the answer is a bit more nuanced. Let’s see why.

“Colleges and universities” is a generic bare plural. I don’t think this claim should require any argument, when you think about it, but here are a few reasons.

First, ask yourself, honestly, whether the following speech sounds good to you: “Eight colleges and universities—namely, those in the Ivy League—ought not consider standardized tests in undergraduate admissions decisions. Maybe other colleges and universities ought to consider them, but not the Ivies. Therefore, in the United States, colleges and universities ought not consider standardized tests in undergraduate admissions decisions.” That is obviously not a valid argument: the conclusion does not follow. Anyone who sincerely believes that it is valid argument is, to be charitable, deeply confused. But the inference above would be good if “colleges and universities” in the resolution were existential. By way of contrast: “Eight birds are singing outside my window. Maybe lots of birds aren’t singing outside my window, but eight birds are. Therefore, birds are singing outside my window.” Since the bare plural “birds” in the conclusion gets an existential reading, the conclusion follows from the premise that eight birds are singing outside my window: “eight” entails “some.” If the resolution were existential with respect to “colleges and universities,” then the Ivy League argument above would be a valid inference. Since it’s not a valid inference, “colleges and universities” must be a generic bare plural.

Second, “colleges and universities” fails the [upward-entailment test](https://plato.stanford.edu/entries/generics/#IsolGeneInte) for existential uses of bare plurals. Consider the sentence, “Lima beans are on my plate.” This sentence expresses an existential statement that is true just in case there are some lima beans on my plate. One test of this is that it entails the more general sentence, “Beans are on my plate.” Now consider the sentence, “Colleges and universities ought not consider the SAT.” (To isolate “colleges and universities,” I’ve eliminated the other bare plurals in the resolution; it cannot plausibly be generic in the isolated case but existential in the resolution.) This sentence does not entail the more general statement that educational institutions ought not consider the SAT. This shows that “colleges and universities” is generic, because it fails the upward-entailment test for existential bare plurals.

Third, “colleges and universities” fails the adverb of quantification test for existential bare plurals. Consider the sentence, “Dogs are barking outside my window.” This sentence expresses an existential statement that is true just in case there are some dogs barking outside my window. One test of this appeals to the drastic change of meaning caused by inserting any adverb of quantification (e.g., always, sometimes, generally, often, seldom, never, ever). You cannot add any such adverb into the sentence without drastically changing its meaning. To apply this test to the resolution, let’s again isolate the bare plural subject: “Colleges and universities ought not consider the SAT.” Adding generally (“Colleges and universitiesz generally ought not consider the SAT”) or ever (“Colleges and universities ought not ever consider the SAT”) result in comparatively minor changes of meaning. (Note that this test doesn’t require there to be no change of meaning and doesn’t have to work for every adverb of quantification.) This strongly suggests what we already know: that “colleges and universities” is generic rather than existential in the resolution.

#### Violation: They spec \_\_\_\_\_\_

#### Standards:

#### [1] precision – the counter-interp justifies them arbitrarily doing away with random words in the resolution which decks negative ground and preparation because the aff is no longer bounded by the resolution. Independent voter for jurisdiction – the judge doesn’t have the jurisdiction to vote aff if there wasn’t a legitimate aff.

#### [2] Limits and ground – their model allows affs to defend anything from Covid vaccines, HIV drugs, Insulin, antiobiotics, CRISPR, cancer, cannabis— there's no universal DA since each has different functions and political implications — that explodes neg prep and leads to random medicine of the week affs which makes cutting stable neg links impossible — limits key to reciprocal engagement since they create a caselist for neg prep and it takes out ground like DAs to certain medicines which are some of the few neg generics when affs spec medicines.

#### [3] TVA solves – you could’ve read your plan as an advantage under a whole res advocacy. Potential abuse doesn’t justify in round abuse, and having no prep leads to cheaty word PICs and Process Cps which are net worse

#### Fairness – debate is a competitive activity that requires fairness for objective evaluation. Outweighs because it’s the only intrinsic part of debate – all other rules can be debated over but rely on some conception of fairness to be justified.

#### Drop the debater – a] deter future abuse and b] set better norms for debate.

#### Competing interps – [a] reasonability is arbitrary and encourages judge intervention since there’s no clear norm, [b] it creates a race to the top where we create the best possible norms for debate.

#### No RVIs – a] illogical, you don’t win for proving that you meet the burden of being fair, logic outweighs since it’s a prerequisite for evaluating any other argument, b] RVIs incentivize baiting theory and prepping it out which leads to maximally abusive practices

#### Rzn on 1AR theory- 2AR responses to the 2NR CI are new and there’s no 3NR to respond- makes it irresolvable

#### DTA on 1AR theory- they can blow up a blippy 20 second shell to 3 min, while I have to spend 2:30 on it- o/w on quantifiability

## 2

#### Permissibility and presumption negate – [a] the resolution indicates the aff has to prove an obligation, and permissibility would deny the existence of an obligation [b] Statements are more often false than true because any part can be false. This means you negate if there is no offense because the resolution is probably false.

#### Ethics must begin a priori:

#### [1] Uncertainty – our experiences are inaccessible to others which allows people to say they don’t experience the same, however a priori principles are universally applied to all agents.

#### [2] Bindingness – I can keep asking “why should I follow this” which results in skep since obligations are predicated on ignorantly accepting rules. Only reason solves since asking “why reason?” requires reason which concedes its authority and equally proves agency as constitutive

#### That means we must universally maxims— any non-universalizable norm justifies someone’s ability to impede on your ends.

#### Thus, the standard is consistency with the categorical imperative.

#### Prefer the standard: [a] Frameworks are topicality interps of the word ought so they should be theoretically justified. Prefer on resource disparities—a focus on evidence and statistics privileges debaters with the most preround prep which excludes lone-wolfs who lack huge evidence files. A debate under my framework can easily be won without any prep since huge evidence files aren’t required.

#### Negate:

#### 1] Intellectual property is an inalienable personal right of economic use

**Pozzo 6** Pozzo, Riccardo. “Immanuel Kant on Intellectual Property.” Trans/Form/Ação, vol. 29, no. 2, 2006, pp. 11–18., doi:10.1590/s0101-31732006000200002. SJ//DA recut Cookie JX

Corpus mysticum, opus mysticum, propriété incorporelle, proprietà letteraria, geistiges Eigentum. All these terms mean **intellectual property, the existence of which is intuitively clear because of the unbreakable bond that ties the work to its creator.** The book belongs to whomever has written it, the picture to whomever has painted it, the sculpture to whomever has sculpted it; and this independently from the number of exemplars of the book or of the work of art in their passages from owner to owner. The initial bond cannot change and it ensures the author authority on the work. Kant writes in section 31/II of the Metaphysics of Morals: “Why does unauthorized publishing, which strikes one even at first glance as unjust, still have an appearance of being rightful? Because on the one hand a book is a corporeal artifact (opus mechanicum) that can be reproduced (by someone in legitimate possession of a copy of it), so that there is a right to a thing with regard to it. On the other hand a book is also a mere discourse of the publisher to the public, which the publisher may not repeat publicly without having a mandate from the author to do so (praestatio operae), and this is a right against a person. The error consists in mistaking one of these rights for the other” (Kant, 1902, t.6, p.290). The corpus mysticum, **the work considered as an immaterial good, remains property of the author on behalf of the original right of its creation. The corpus mechanicum consists of the exemplars of the book or of the work of art. It becomes the property of whoever has bought the material object in which the work has been reproduced or expressed.** Seneca points out in De beneficiis (VII, 6) the difference between owning a thing and owning its use. He tells us that the bookseller Dorus had the habit of calling Cicero’s books his own, while there are people who claim books their own because they have written them and other people that do the same because they have bought them. Seneca concludes that the books can be correctly said to belong to both, for it is true they belong to both, but in a different way **The peculiarity of intellectual property consists thus first in being indeed a property, but property of an action; and second in being indeed inalienable, but also transferable in commission and license to a publisher. The bond the author has on his work confers him a moral right that is indeed a personal right. It is also a right to exploit economically his work in all possible ways, a right of economic use, which is a patrimonial right. Kant and Fichte argued that moral right and the right of economic use are strictly connected, and that the offense to one implies inevitably offense to the other.** In eighteenth-century Germany, the free use came into discussion among the presuppositions of a democratic renewal of state and society. In his Supplement to the Consideration of Publishing and Its Rights, Reimarus asked writers “instead of writing for the aristocracy, to write for the tiers état of the reader’s world.” (Reimarus, 1791b, p.595). **He saluted with enthusiasm the claim of disenfranchising from the monopoly of English publishers expressed in the American Act for the Encouragement of Learning of May 31, 1790. Kant, however, was firm in embracing intellectual property. Referring himself to Roman Law, he asked for its legislative formulation not only as patrimonial right, but also as a personal right.** In Of the Illegitimity of Pirate Publishing, he considered the moral faculties related to **intellectual property as an “inalienable right (ius personalissimum) always himself to speak through anyone else, the right, that is, that no one may deliver the same speech to the public other than in his (the author’s) name”** (Kant, 1902, t.8, p.85). Fichte went farther in the Demonstration of the Illegitimity of Pirate Publishing. **He saw intellectual property as a part of his metaphysical construction of intellectual activity, which was based on the principle that thoughts “are not transmitted hand to hand, they are not paid with shining cash, neither are they transmitted to us if we take home the book that contains them and put it into our library.** In order to make those thoughts our own an action is still missing: we must read the book, meditate – provided it is not completely trivial – on its content, consider it under different aspects and eventually accept it within our connections of ideas” (Fichte, 1964, t.I/1, p.411). At the center of the discussion was the practice of reprinting books in a pirate edition after having them reset word after words after an exemplar of the original edition. Given Germany’s division in a myriad of small states, the imperial privilege was ineffective against pirate publishing. Kant and Fichte spoke for the acceptance of the right to defend the work of an author by the usurpations of others so that he may receive a patrimonial advantage from those who utilize the work acquiring new knowledge and/or an aesthetic experience. In particular, Fichte declared the absolute primacy of the moral faculties within the corpus mysticum. He divided the latter into a formal and a material part. “This intellectual element must be divided anew into what is material, the content of the book, the thoughts it presents; and the form of these thoughts, the manner in which, the connection in which, the formulations and the words by means of which the book presents them” (Fichte, 1964, t.I/1, p.411). Fichte’s underlining the author’s exclusive right to the intellectual content of his book – “the appropriation of which through another is physically impossible” (ibid.) – brought him to the extreme of prohibiting any form of copy that is not meant for personal use. In Publishing Considered anew, Reimarus considered on the contrary copyright in its patrimonial aspects as a limitation to free trade: “What would not happen were a universal protection against pirate publishing guaranteed? Monopoly and safer sales certainly do not procure convenient price; on the contrary, they are at the origin of great abuses. The only condition for convenient price is free-trade, and one cannot help noticing that upon the appearance of a private edition, publishers are forced to substantially lower the price of a book” (Reimarus, 1791a, pp.402-3). Reimarus admitted of being unable to argue in terms of justice. Justice was of no bearing, he said, for whom, like himself, considered undemonstrated the author’s permanent property of his work (herein supported by the legislative vacuum of those years). What mattered, he said, was equity. In sum, Reimarus anticipated today’s stance on free use by referring to the principle that public interest on knowledge ought to prevail on the author’s interest and to balance the copyright. Moreover, Reimarus extended his argument beyond the realm of literary production to embrace, among others, the today vital issue of pharmaceutical production on patented receipts. “Let us suppose that at some place a detailed description for the preparation of a good medicine or of any other useful thing be published, why may not somebody who lives in places that are far away from that one copy it to use it for his own profit and but must instead ask the original publisher for the issue of each exemplar?” (Reimarus, 1791b, t.2, pp.584). To sum up, Reimarus’s stance does not seem respondent to rule of law. For in all dubious case the general rule ought to prevail, fighting intellectual property with anti-monopolistic arguments in favor of free trade brings with itself consequences that are not tranquilizing also for the ones that are expected to apply the law. **By resetting literary texts, one could obviously expurgate some errors. More frequently, however, some were added, given the exclusively commercial objectives of the reprints. The valid principle was, thus, that reprints were less precise than original editions, but they were much cheaper for the simple reason that the pirate publisher had a merely moral obligation against the author and the original publisher. In fact, he was not held to pay any honorarium to the author upon handling over the manuscript, nor to paying him royalties, nor to pay anything to the original publisher. The** only expense in charge of the pirate publisher was buying the exemplar of the original edition out of which he was to make, as we say today, a free use.

#### 2]The aff violates the categorical imperative and is non-universalizable- governments have a binding obligation to protect creations

**Van Dyke 18** Raymond Van Dyke, 7-17-2018, "The Categorical Imperative for Innovation and Patenting," IPWatchdog, <https://www.ipwatchdog.com/2018/07/17/categorical-imperative-innovation-patenting/id=99178/> SJ//DA recut SJKS

As we shall see, applying **Kantian logic entails first acknowledging some basic principles; that the people have a right to express themselves, that that expression (the fruits of their labor) has value and is theirs (unless consent is given otherwise), and that government is obligated to protect people and their property. Thus, an inventor or creator has a right in their own creation, which cannot be taken from them without their consent.** So, employing this canon, **a proposed Categorical Imperative (CI) is the following Statement: creators should be protected against the unlawful taking of their creation by others. Applying this Statement to everyone, i.e., does the Statement hold water if everyone does this, leads to a yes determination. Whether a child, a book or a prototype, creations of all sorts should be protected, and this CI stands.** This result also dovetails with the purpose of government: to protect the people and their possessions by providing laws to that effect, whether for the protection of tangible or intangible things. **However, a contrary proposal can be postulated: everyone should be able to use the creations of another without charge. Can this Statement rise to the level of a CI? This proposal, upon analysis would also lead to chaos. Hollywood, for example, unable to protect their films, television shows or any content, would either be out of business or have robust encryption and other trade secret protections, which would seriously undermine content distribution and consumer enjoyment.** Likewise, inventors, unable to license or sell their innovations or make any money to cover R&D, would not bother to invent or also resort to strong trade secret. Why even create? This approach thus undermines and greatly hinders the distribution of ideas in a free society, which is contrary to the paradigm of the U.S. patent and copyright systems, which promotes dissemination. By allowing freeriding, innovation and creativity would be thwarted (or at least not encouraged) and trade secret protection would become the mainstay for society with the heightened distrust.

#### 3]The aff encourages free riding- that treats people as ­means to an end and takes advantage of their efforts which violates the principle of humanity

**Van Dyke 2** Raymond Van Dyke, 7-17-2018, "The Categorical Imperative for Innovation and Patenting," IPWatchdog, <https://www.ipwatchdog.com/2018/07/17/categorical-imperative-innovation-patenting/id=99178/> SJ//DA recut SJKS

Also, **allowing the free taking of ideas, content and valuable data, i.e., the fruits of individual intellectual endeavor**, would disrupt capitalism in a radical way. **The resulting more secretive approach in support of the above free-riding Statement** would be akin to a Communist environment **where the State owned everything and the citizen owned nothing, i.e., the people “consented” to this. It is, accordingly, manifestly clear that no reasonable and supportable Categorical Imperative can be made for the unwarranted theft of property, whether tangible or intangible,** apart from legitimate exigencies.

## 3

#### Bipartisan infrastructure bill passing now but PC is needed – there is no margin for error.

Kapur et al 9/8 [Sahil, Frank Thorp, and Leigh Ann Caldwell; 9/8/21; Sahil Kapur is a national political reporter for NBC News, Frank Thorp V is a producer and off-air reporter covering Congress for NBC News, managing coverage of the Senate, Leigh Ann Caldwell is an NBC News correspondent; “*Democrats plow 'full speed ahead' on sweeping Biden budget, despite tensions*,” <https://www.nbcnews.com/politics/congress/democrats-plow-full-speed-ahead-sweeping-biden-budget-despite-tensions-n1278722>] Justin

WASHINGTON — The top two Democrats said they’re pushing forward with President Joe Biden’s sweeping safety net expansion, as House committees circulate legislative text with hearings scheduled Thursday to start advancing major sections of the bill. “We're moving full speed ahead,” Senate Majority Leader Chuck Schumer told reporters on a call Wednesday. The New York Democrat effectively cast aside calls by Sen. Joe Manchin, D-W.Va., for a “strategic pause” in the process of crafting the bill, as he voiced concerns about inflation and debt in a recent op-ed for the Wall Street Journal. Schumer is navigating demands by Manchin, as well as Sen. Kyrsten Sinema, D-Ariz., to reduce the price tag that Democrats set at a maximum of $3.5 trillion in the budget resolution. “There are some in my caucus who believe $3.5 trillion is too much; there are some in my caucus who believe it's too little,” Schumer said. “We're going to work very hard to have unity, because without unity, we're not going to get anything.” Speaker Nancy Pelosi said Wednesday the House is moving forward at the $3.5 trillion level. But she left open the possibility of a lower final price tag before the bill becomes law, while promising that “we will get the job done” with “a great bill” that honors Biden’s vision. “We will have our negotiations,” Pelosi, D-Calif., said, when asked by NBC News if the House could pass a bill at a lower amount. “I don’t know what the number will be. We are marking at 3.5 [trillion]. ... We will pay for more than half, maybe all of the legislation.” The remarks by Schumer and Pelosi point to a complicated balancing act, facing a broad range of opinions from centrist lawmakers skeptical of the price tag to progressives who believe $3.5 trillion should be the minimum. Democratic leaders are also juggling an aggressive timeline by seeking to ready the bill by Sept. 27 — the self-imposed House deadline to vote on the separate infrastructure bill — to ensure progressives will support the latter. They are betting Manchin can ultimately be won over on the substance of the package. Lawmakers and committees are keeping options open in case the price tag needs to be cut: For instance, they’ve privately discussed setting some provisions to expire sooner. Manchin has been somewhat vague in his demands. He has not specified what price tag he would support or what provisions of the emerging bill he wants to cut. His office did not have a comment when asked those questions Wednesday. In June, he said on ABC's "This Week" that he wants to “make sure we pay for” the bill. A source close to Manchin said he is a big proponent of targeting benefits on the basis of income and capping them so the money reaches people who need it the most — principles he believes are critical for Democrats' proposals on community college subsidies and on home-based care provisions for the disabled and elderly. Manchin also has issues with the climate change proposals in the legislation, the source said. As chairman of the Senate Energy and Natural Resources Committee, Manchin has major influence over the climate provisions. His committee was instructed to write legislation costing $198 billion for a clean electricity payment program, consumer rebates to weatherize and electrify homes, the creation of financing for domestic manufacturing of clean energy and auto supply chain technologies and climate research. “He’s not opposed to the overall bill,” the source said. “He’s going to shape the bill to what he feels is closer to the needs. People shouldn’t read into it more than that.” Senate Budget Chair Bernie Sanders, I-Vt., has said if the safety net package does not pass, the $550 billion bipartisan infrastructure package — which Manchin co-wrote — will fail as well. He told reporters the $3.5 trillion level was too low. “To my mind, this bill, that $3.5 trillion, is already the result of a major, major compromise,” Sanders said. “And at the very least, this bill should contain $3.5 trillion.” Pelosi said slashing the cost would require making difficult policy choices. “We have to talk about: What does it take? Where would you cut?” she asked. “Child care? Family medical leave paid for? Universal pre-K? Home health care?” On Thursday, the House committees on ways and means and education and labor will hold hearings on major portions of the bill they released this week. That includes 12 weeks' paid family and medical leave for all workers; expanding Medicare to cover dental, vision and hearing benefits; universal pre-K for 3- and 4-year-olds; and two years' tuition-free community college. Republicans are unified against the effort, leaving Democrats to pass the bill alone under narrow majorities. The package can bypass a Senate filibuster. Senate Minority Leader Mitch McConnell, R-Ky., said Wednesday that he hopes Manchin and Sinema “will dig in their heels” against some of the tax increases Democrats are eyeing to finance the package. “It comes down to — in the Senate — to two people,” he said. “Either one of them could kill the whole bill. I don't expect that to happen,” he said. “Either one of them could make dramatic changes in it — that could happen. Or either one of them could basically make a few cosmetic changes and throw in the towel.”

#### Aff doesn’t solve but requires negotiations that saps PC.

Pooley 21 [James; Former deputy director general of the United Nations’ World Intellectual Property Organization and a member of the Center for Intellectual Property Understanding; “Drawn-Out Negotiations Over Covid IP Will Blow Back on Biden,” Barron’s; 5/26/21; <https://www.barrons.com/articles/drawn-out-negotiations-over-covid-ip-will-blow-back-on-biden-51621973675>] Justin

The Biden administration recently announced its support for a proposal before the World Trade Organization that would suspend the intellectual property protections on Covid-19 vaccines as guaranteed by the landmark TRIPS Agreement, a global trade pact that took effect in 1995. The decision has sparked furious debate, with supporters arguing that the decision will speed the vaccine rollout in developing countries. The reality, however, is that even if enacted, the IP waiver will have zero short-term impact—but could inflict serious, long-term harm on global economic growth. The myopic nature of the Biden administration’s announcement cannot be overstated. Even if WTO officials decide to waive IP protections at their June meeting, it’ll simply kickstart months of legal negotiations over precisely which drug formulas and technical know-how are undeserving of IP protections. And it’s unthinkable that the Biden administration, or Congress for that matter, would actually force American companies to hand over their most cutting-edge—and closely guarded—secrets. As a result, the inevitable foot-dragging will cause enormous resentment in developing countries. And that’s the real threat of the waiver—precisely because it won’t accomplish either of its short-term goals of improving vaccine access and facilitating tech transfers from rich countries to developing ones. It’ll strengthen calls for more extreme, anti-IP measures down the road. Experts overwhelmingly agree that waiving IP protections alone won’t increase vaccine production. That’s because making a shot is far more complicated than just following a

recipe, and two of the most effective vaccines are based on cutting-edge discoveries using messenger RNA. As Moderna Chief Executive Stephane Bancel said on a recent earnings call, “This is a new technology. You cannot go hire people who know how to make the mRNA. Those people don’t exist. And then even if all those things were available, whoever wants to do mRNA vaccines will have to, you know, buy the machine, invent the manufacturing process, invent creation processes and ethical processes, and then they will have to go run a clinical trial, get the data, get the product approved and scale manufacturing. This doesn’t happen in six or 12 or 18 months.” Anthony Fauci, the president’s chief medical adviser, has echoed that sentiment and emphasized the need for immediate solutions. “Going back and forth, consuming time and lawyers in a legal argument about waivers—that is not the endgame,” he said. “People are dying around the world and we have to get vaccines into their arms in the fastest and most efficient way possible.” Those claiming the waiver poses an immediate, rather than long-term, threat to IP rights also misunderstand what the waiver will—and won’t—do. The waiver petition itself is more akin to a statement of principle than an actual legal document. In fact, it’s only a few pages long. As the Office of the United States Trade Representative has said, “Text-based negotiations at the WTO will take time given the consensus-based nature of the institution and the complexity of the issues involved.” The WTO director-general predicts negotiations will last until early December. That’s a lot of wasted time and effort. The U.S. Trade Representative would be far better off spending the next six months breaking down real trade barriers and helping export our surplus vaccine doses and vaccine ingredients to countries in need.

#### Infrastructure secures the grid against worsening and increasing cyberattacks.

Carney 21 [Chris; 8/6/21; Senior policy advisor at Nossaman LLC, former US Representative, former professor of political science at Penn State University; "*The US Senate Infrastructure Bill: Securing Our Electrical Grid Through P3s and Grants*," JDSupra, <https://www.jdsupra.com/legalnews/the-us-senate-infrastructure-bill-4989100/>] Justin

As we begin to better understand the main components of the Infrastructure Investment and Jobs Act that the US Senate is working to pass this week, it is clear that public-private partnerships ("P3s") are a favored funding mechanism of lawmakers to help offset high costs associated with major infrastructure projects in communities. And while past infrastructure bills have used P3s for more conventional projects, the current bill also calls for P3s to help pay for protecting the US electric grid from cyberattacks. Responding to the increasing number of cyberattacks on our nation’s infrastructure, and given the fragile physical condition of our electrical grid, the Senate included provisions to help state, local and tribal entities harden electrical grids for which they are responsible. Section 40121, Enhancing Grid Security Through Public-Private Partnerships, calls for not only physical protections of electrical grids, but also for enhancing cyber-resilience. This section seeks to encourage the various federal, state and local regulatory authorities, as well as industry participants to engage in a program that audits and assesses the physical security and cybersecurity of utilities, conducts threat assessments to identify and mitigate vulnerabilities, and provides cybersecurity training to utilities. Further, the section calls for strengthening supply chain security, protecting “defense critical” electrical infrastructure and buttressing against a constant barrage of cyberattacks on the grid. In determining the nature of the partnership arrangement, the size of the utility and the area served will be considered, with priority going to utilities with fewer available resources. Section 40122 compliments the previous section as it seeks to incentivize testing of cybersecurity products meant to be used in the energy sector, including SCADA systems, and to find ways to mitigate any vulnerabilities identified by the testing. Intended as a voluntary program, utilities would be offered technical assistance and databases of vulnerabilities and best practices would be created. Section 40123 incentivizes investment in advanced cybersecurity technology to strengthen the security and resiliency of grid systems through rate adjustments that would be studied and approved by the Secretary of Energy and other relevant Commissions, Councils and Associations. Lastly, Section 40124, a long sought-after package of cybersecurity grants for state, local and tribal entities is included in the bill. This section adds language that would enable state, local and tribal bodies to apply for funds to upgrade aging computer equipment and software, particularly related to utilities, as they face growing threats of ransomware, denial of service and other cyberattacks. However, under Section 40126, cybersecurity grants may be tied to meeting various security standards established by the Secretary of Homeland Security, and/or submission of a cybersecurity plan by a grant applicant that shows “maturity” in understanding the cyber threat they face and a sophisticated approach to utilizing the grant. While the final outcome of the Infrastructure Investment and Jobs Act may still be weeks or months away, inclusion of these provisions not only demonstrates a positive step forward for the application of federal P3s and grants generally, they also show that Congress recognizes the seriousness of the cyber threats our electrical grids face. Hopefully, through judicious application of both public-private partnerships and grants, the nation can quickly secure its infrastructure from cyberattacks.

#### Cyberattacks on the grid spiral to all-out nuclear conflict.

Klare 19 [Michael; November 2019; Professor emeritus of peace and world security studies at Hampshire College; “*Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation*,” Arms Control Association, <https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation>] Justin

Yet another pathway to escalation could arise from a cascading series of cyberstrikes and counterstrikes against vital national infrastructure rather than on military targets. All major powers, along with Iran and North Korea, have developed and deployed cyberweapons designed to disrupt and destroy major elements of an adversary’s key economic systems, such as power grids, financial systems, and transportation networks. As noted, Russia has infiltrated the U.S. electrical grid, and it is widely believed that the United States has done the same in Russia.12 The Pentagon has also devised a plan known as “Nitro Zeus,” intended to immobilize the entire Iranian economy and so force it to capitulate to U.S. demands or, if that approach failed, to pave the way for a crippling air and missile attack.13 The danger here is that economic attacks of this sort, if undertaken during a period of tension and crisis, could lead to an escalating series of tit-for-tat attacks against ever more vital elements of an adversary’s critical infrastructure, producing widespread chaos and harm and eventually leading one side to initiate kinetic attacks on critical military targets, risking the slippery slope to nuclear conflict. For example, a Russian cyberattack on the U.S. power grid could trigger U.S. attacks on Russian energy and financial systems, causing widespread disorder in both countries and generating an impulse for even more devastating attacks. At some point, such attacks “could lead to major conflict and possibly nuclear war.”14

## Case

### TL

#### [1] THERE IS NOT A SINGLE CARD IN THE AFF THAT DESCRIBES THE WORLD OF CRISPR INNOVATION POST PATENT REMOVALS, BE INCREDIBLY SKEPTICAL OF ALL OF THEIR SOLVENCY CLAIMS. EVEN IF THE WORLD OF PATENTS IS IMPERFECT THEY HAVE NO EV THAT SAYS THEIR MODEL IS BETTER.

#### [2] LABANT PROVES CRISPR APPLICATIONS ARE ALREADY HAPPENING IN FIELDS RELATED TO CLIMATE CHANGE PROVES THE AFF ISN’T NECESSARY TO SPILL OVER

### **Innovation**

#### Alt methods solve- normal innovation, mRNA vaccines- theres no ev on why CRISPR is k2 solve disease

#### DA o/w on timeframe- no disease scenario outlined for an outbreak and takes years to kill

#### Patent disputes are about CRISPR not genomic disputes---your author.

**Sherkow 17** [(Jacob, Professor of Law at the College of Law and Affiliate of the Carl R. Woese Institute for Genomic Biology at the University of Illinois, where his research focuses on the legal and ethical implications of advanced biotechnologies, especially as related to intellectual property. He is a leading expert on IP protection for genome-editing technologies, including CRISPR. He is the author of over 60 articles published in both scientific journals and traditional law reviews, including Science, Nature, the Yale Law Journal, and the Stanford Law Review. Since 2018, Sherkow has also been a Permanent Visiting Professor at the Center for Advanced Studies in Biomedical Innovation Law (“CeBIL”) at the University of Copenhagen Faculty of Law) “Patent protection for CRISPR: an ELSI review” Journal of Law and the Biosciences 12/7/2017 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5965580/>] // Re-Cut Justin

Since the first U.S. patent applications were filed for an engineerable CRISPR system in 2012, the IP landscape has become significantly more crowded, with several researchers controlling a few significant battlements. To date, three groups of scientists have emerged as holders of foundational patents covering CRISPR-Cas9: Jennifer Doudna (UC Berkeley) and Emmanuelle Charpentier (now at Max-Planck, but at Umeå University, Sweden, at the time of her contribution to the invention), Feng Zhang (Broad Institute), and Virginijus Šikšnys (Vilnius University, Lithuania). Contrary to popular belief, Šikšnys was the first of the three to file a patent application covering his variation on the technology. Šikšnys filed for his patent on March 20, 2012,[4](javascript:;) although it did not issue—that is, it was not formally granted by the U.S. Patent and Trademark Office (U.S.P.T.O.)—until May 2, 2017.[5](javascript:;) For a number of reasons, Šikšnys’ contributions—both to the science CRISPR and the technology's patent dispute—have been overlooked.[6](javascript:;) But Šikšnys’ patent covers using CRISPR-Cas9 through an in vitro, pre-assembled Cas9: RNA complex—also known as CRISPR ribonucleoproteins—an important iteration of the technology for a variety of applications.[7](javascript:;)

More famously, Doudna and Charpentier first filed their fundamental patent application covering CRISPR-Cas9 on May 25, 2012.[8](javascript:;) Their original patent application contained over 150 claims—particular ways to practice the invention that defined the application's boundaries—and was notably unspecific with respect to cell type.[9](javascript:;) Nonetheless, Doudna and Charpentier's patent attorneys pegged their clients’ invention broadly, as the use of a single-guide RNA to mediate the editing of genomic DNA.[10](javascript:;) It was the ease, flexibility, and precision of this advance that has largely thrust CRISPR into the lay lexicon.[11](javascript:;)

During the pendency of Doudna and Charpentier's application in the USA, Zhang also filed a U.S. patent application—directed specifically to eukaryotic applications of CRISPR-Cas9.[12](javascript:;) The principal improvement of Zhang's methods over his predecessors was the use of a nuclear localization signal and, separately, codon optimization to natively express Cas9.[13](javascript:;) But Zhang's attorneys fast tracked his application through the U.S.P.T.O., a relatively expensive and strategically risky process.[14](javascript:;) As a consequence, Zhang's patent—even though it was filed after applications from Doudna, Charpentier, and Šikšnys—was issued first in the USA.[15](javascript:;) That quandary gave rise to the now-famous patent dispute in the USA, the first round of which was won by Zhang.[16](javascript:;) The remainder of it is still being appealed; a decision is expected in late 2018.[17](javascript:;)

The U.S. interference decision, however, stands apart from the rest of the world. As detailed—excellently—by Knut Jørgen Egelie and his colleagues at Norwegian University of Science and Technology—the global CRISPR patent landscape is varied.[18](javascript:;) Europe has now officially sided with Doudna and Charpentier over Zhang, although opposition proceedings at the European Patent Office have just begun.[19](javascript:;) And China, too, recently sided with Doudna and Charpentier.[20](javascript:;) These conflicting decisions are further complicated by a set of interlocking license agreements from the inventors’ biotech companies, with a great deal of uncertainty playing out in the global commercial sector for CRISPR.[21](javascript:;) Unraveling those agreements, and the issues raised by the patenting of the technology in the first instance, speaks volumes about the values and pitfalls of patents in the research enterprise.

#### CRISPR fails.

**CUMC 17**, Columbia University Medical Center, 5-30-2017, "CRISPR Gene Editing Can Cause Hundreds of Unintended Mutations," http://newsroom.cumc.columbia.edu/blog/2017/05/30/crispr-gene-editing-can-cause-hundreds-of-unintended-mutations/

As CRISPR-Cas9 starts to move into clinical trials, a new study published in Nature Methods has found that the gene-editing technology can introduce hundreds of unintended mutations into the genome. “We feel it’s critical that the scientific community consider the potential hazards of all off-target mutations caused by CRISPR, including single nucleotide mutations and mutations in non-coding regions of the genome,” says co-author Stephen Tsang, MD, PhD, the Laszlo T. Bito Associate Professor of Ophthalmology and associate professor of pathology & cell biology in the Institute of Genomic Medicine and the Institute of Human Nutrition at Columbia University Medical Center. CRISPR-Cas9 editing technology—by virtue of its speed and unprecedented precision—has been a boon for scientists trying to understand the role of genes in disease. The technique also has raised hope for more powerful gene therapies that can delete or repair flawed genes, not just add new genes. The first clinical trial to deploy CRISPR is now underway in China, and a U.S. trial is slated to start next year. But even though CRISPR can precisely target specific stretches of DNA, it sometimes hits other parts of the genome. Most studies that search for these off-target mutations use computer algorithms to identify areas most likely to be affected and then examine those areas for deletions and insertions. “These predictive algorithms seem to do a good job when CRISPR is performed in cells or tissues in a dish, but whole genome sequencing has not been employed to look for all off-target effects in living animals,” says co-author Alexander Bassuk, MD, PhD, professor of pediatrics at the University of Iowa. In the new study, the researchers sequenced the entire genome of mice that had undergone CRISPR gene editing in the team’s previous study and looked for all mutations, including those that only altered a single nucleotide. The researchers determined that CRISPR had successfully corrected a gene that causes blindness, but Kellie Schaefer, a PhD student in the lab of Vinit Mahajan, MD, PhD, associate professor of ophthalmology at Stanford University, and co-author of the study, found that the genomes of two independent gene therapy recipients had sustained more than 1,500 single-nucleotide mutations and more than 100 larger deletions and insertions. None of these DNA mutations were predicted by computer algorithms that are widely used by researchers to look for off-target effects. “Researchers who aren’t using whole genome sequencing to find off-target effects may be missing potentially important mutations,” Dr. Tsang says. “Even a single nucleotide change can have a huge impact.”

#### CRISPR’s useless OR mutations are inev regardless

Fu et al 13 [Yanfang Fu, Molecular Pathology Unit at Mass General Hospital, Department of Pathology, Harvard Medical School.] “High-frequency off-target mutagenesis induced by CRISPR-Cas nucleases in human cells” Nature Biotechnology volume 31, pages 822–826 (2013) (https://www.nature.com/articles/nbt.2623) – MZhu

Clustered, regularly interspaced, short palindromic repeat (CRISPR) RNA-guided nucleases (RGNs) have rapidly emerged as a facile and efficient platform for genome editing. Here, we use a human cell–based reporter assay to characterize off-target cleavage of CRISPR-associated (Cas)9-based RGNs. We find that single and double mismatches are tolerated to varying degrees depending on their position along the guide RNA (gRNA)-DNA interface. We also readily detected off-target alterations induced by four out of six RGNs targeted to endogenous loci in human cells by examination of partially mismatched sites. The off-target sites we identified harbored up to five mismatches and many were mutagenized with frequencies comparable to (or higher than) those observed at the intended on-target site. Our work demonstrates that RGNs can be highly active even with imperfectly matched RNA-DNA interfaces in human cells, a finding that might confound their use in research and therapeutic applications.

### WTO Cred

#### DON’T LET THEM SHIFT OUT OF THE LINK- 1AC TONNESON LITRALLY SAYS ECON DECLINE BAD

#### Even if protectionism is a independent IL (which its not- its still ccauses econ decline)- no warrant on why competition causes nuke war- hold the line

#### No war - Cheap talk solves.

Carter 18 Erin Baggott Carter, International Relations Professor at the University of Southern California. [Diversionary Cheap Talk: Unemployment and US Foreign Policy Rhetoric, 1945-2010, http://www.erinbcarter.org/documents/diversionUS.pdf]//BPS

5 Conclusion This study shows that when economic conditions deteriorate, American presidents consolidate domestic support by criticizing other countries. By cueing national identity and highlighting differences between nations, they elicit an ingroup rally that boosts their popularity. Poll data show that citizens evaluate leaders more highly after they engage in hostile for¬eign policy rhetoric and economic data show that leaders are more likely to engage in that rhetoric when unemployment (or the misery index) is higher. Further strengthening the no¬tion that this behavior is strategic, leaders target traditional adversaries for hostile foreign policy rhetoric, since threatening outgroups render intergroup distinctions most stark. I find no evidence for diversion in the form of material dispute initiation. For leaders choosing between hostile rhetoric, economic reform, and international conflict to increase domestic popularity, hostile rhetoric is the least costly and risky option, even though it is a short term solution because sustained bluster invites the criticism of party elites. For American presidents, cheap talk pays. Future research should focus on three areas. First, citizens have multiple political al¬legiances. The political communication literature suggests that the media is an important intermediary between elites and citizens. For example, rallies are smaller when there is elite debate surrounding a presidential action. While this study finds that presidents are able to generate rallies with rhetoric and that rallies are mediated by citizen partisanship, further research might focus on how sub- and superordinate group membership affects the accep¬tance of political cues from leaders in a more complex—perhaps experimental—framework. Second, there is little research on political rhetoric in less representative countries. Diversionary cheap talk is not particular to America: Mahmoud Ahmadinejad and Hugo Chavez 10 won massive popularity through their anti-Americanism, for instance. Chinese policymak¬ers bluster about the South China Sea to increase their domestic legitimacy. Scholars have devoted relatively little attention to rhetoric in international politics due, in part, to scarce data. The American Diplomacy Dataset helps address that paucity. While verbal and material behavior are theoretically and empirically distinct, they are sometimes substitutes, and the rhetorical aspects of international politics remain under-theorized and under-explored.

#### Stats prove.

Daniel Drezner **’**14, IR prof at Tufts, The System Worked: Global Economic Governance during the Great Recession, World Politics, Volume 66. Number 1, January 2014, pp. 123-164

The final significant outcome addresses a dog that hasn't barked: the effect of the Great Recession on cross-border conflict and violence. During the initial stages of the crisis, multiple analysts asserted that the financial crisis would lead states to increase their use of force as a tool for staying in power.42 They voiced genuine concern that the global economic downturn would lead to an increase in conflict—whether through greater internal repression, diversionary wars, arms races, or a ratcheting up of great power conflict. Violence in the Middle East, border disputes in the South China Sea, and even the disruptions of the Occupy movement fueled impressions of a surge in global public disorder. The aggregate data suggest otherwise, however. The Institute for Economics and Peace has concluded that "the average level of peacefulness in 2012 is approximately the same as it was in 2007."43 Interstate violence in particular has declined since the start of the financial crisis, as have military expenditures in most sampled countries. Other studies confirm that the Great Recession has not triggered any increase in violent conflict, as Lotta Themner and Peter Wallensteen conclude: "[T]he pattern is one of relative stability when we consider the trend for the past five years."44 The secular decline in violence that started with the end of the Cold War has not been reversed. Rogers Brubaker observes that "the crisis has not to date generated the surge in protectionist nationalism or ethnic exclusion that might have been expected."43

#### Growth means extinction:

#### Warming – Growth causes converging ecological crises that culminate in extinction

Williams ‘19 (Casey Williams; freelance writer covering climate, environment, and labor politics, citing Ingrid Visseren-Hamakers, associate professor of environmental science and policy at George Mason University and a coordinating lead author of the IPBES report; 5/16/19; "The “Great Dying” Has Begun. Only Transforming the Economy Can Stop It."; *Medium*; https://onezero.medium.com/the-great-dying-has-begun-only-transforming-the-economy-can-stop-it-4eadd8f7ccf8)

Extinction has threatened Earth’s plant and animal life several times over the planet’s multibillion-year history. During the mass extinction event called the “Great Dying,” around 250 million years ago, 96% of all marine species died out – gone forever. Life is once again headed for total collapse. While coverage of last week’s major Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report on biodiversity loss rightly played up the dire numbers – an estimated 1 million species gone by 2050 – what’s truly remarkable are the solutions the authors offer in response. Ditching the timid pragmatism of technocrats, these scientists are calling for nothing less than the total transformation of the global economy. Producing for profit has failed us, they say, and failed the planet. We need a new system. Only “transformative change” can stop massive species loss, according to the report’s conclusion. That means overhauling the global economy to prioritize human well-being and environmental sustainability rather than the pursuit of profit. “We’re not addressing the underlying causes of biodiversity loss, which is the way we organize economies, production and consumption patterns, our institutions, and our rules,” says Ingrid Visseren-Hamakers, associate professor of environmental science and policy at George Mason University and a coordinating lead author of the IPBES report. “We need to transform the sheer fabric of our society to become more sustainable.” Today’s great dying is happening faster than ever before, and its causes are clear: breakneck development, fossil-fueled global warming, industrial pollution, single-crop agriculture. Complex as these processes are, they point to a common culprit: A growth-based economic system bent on wringing cash from nature has exploited the planet’s ecosystems beyond what they can bear. Now, Earth’s fragile life-support system is entering a death spiral that threatens human existence and which no one is prepared to stop. Evidence of an impending mass extinction has been accumulating for years, but this report paints an especially dire picture of the pace and scale of the crisis. Plant and animal species are vanishing at an unprecedented rate: 1 million of Earth’s 8 million known species could go extinct within 30 years. Biodiversity “is declining faster than at any time in human history,” the report’s authors conclude. And with it, the ecological prerequisites for human life are dwindling: clean air and water, healthy food, stable climates, medicines, and much more. Efforts to slow the dying have proven woefully inadequate. Governments will miss key conservation targets in the coming years, signing death warrants for countless corals and amphibians and exposing up to 300 million additional people to dangerous flooding as coastal habitats vanish. That’s because governments, businesses, and others have failed to tackle root causes of ecosystem collapse. “It’s inevitable that you come to conclusions like this, because that’s what the science says.” IPBES is careful to remain nonpartisan and lays out options, not prescriptions, for policymakers. But the report’s conclusions are “in essence political,” Visseren-Hamakers says. “We’re changing the goals of our society. We want to switch the goal from making profit to living sustainably.” The authors of the report propose “steering away from the current limited paradigm of economic growth,” though they “expect opposition from those with interests vested in the status quo.” Given that growth is the market economy’s animating principle, this is essentially code for overhauling global capitalism and angering some large corporations in the process. Like the Intergovernmental Panel on Climate Change’s 2018 Special Report on Global Warming, the new study’s frankness is history-making. After years of highlighting piecemeal reforms, the scientific community is now asking us to completely rethink modern society. Not because they’re ideological, but because they’re scientists. They go where the evidence leads. “It’s inevitable that you come to conclusions like this, because that’s what the science says,” Visseren-Hamakers says. Of course, the authors also offer less drastic solutions. Deep in the report, they suggest that putting a price tag on “ecosystem services” can help account for and redress the costs of treating nature like a waste dump. It’s an old idea. Factoring nature’s value into economic calculations would eliminate “perverse incentives” to pollute and give companies and governments greater incentive to conserve biodiversity. For example, carbon pricing is designed to account for the value of a stable climate. Factoring environmental costs of carbon pollution into production decisions should discourage, in theory, the use of fossil fuels that, directly and indirectly, degrade ecosystems. Though not particularly ambitious, pricing nature was once widely believed to be a pragmatic response to species loss. “Fifteen years ago, financialization of nature schemes would have been front and center of a report like this,” says Jesse Goldstein, assistant professor of sociology at Virginia Commonwealth University. The fact that such policies are not front and center marks a historic shift in tone. Pragmatic scientists and policymakers want fast, achievable solutions to urgent problems. And so, for decades, they’ve resisted calling for fundamental changes to the economic system. Even when it’s been clear that economic growth accelerates biodiversity loss, reigning in global capitalism has seemed too drastic, cumbersome, and infeasible to count as a realistic solution to the crisis. “The overarching language [of the report] says everything’s got to change,” Goldstein says. “But the assumption is that massive, transformative political and economic change takes too much time and that technocratic and technological policy-based solutions are quicker.” But now it’s the pragmatic solutions that seem out of step with the reality of the extinction crisis. Given the deadly seriousness of species extinction, the most ambitious solutions have become the most necessary. It would be reductive to attribute biodiversity loss solely to modern capitalism. After all, humans have destroyed environments since they learned to whittle sticks into spears and clear forests to make farms. Indigenous peoples in North America wiped out the mastodon long before they could hope to cash in on its hide. But capitalism introduces a totally different set of incentives: Once plant and animal life is viewed as a production input, a cash engine, or an acceptable casualty of profit accumulation, it makes sense to wring revenue from life until it’s gone, especially when competitive pressures reward making a quick buck. The IPBES report makes clear that today’s great dying differs in kind, not degree, from earlier waves of biodiversity loss. Since 1900, the abundance of major species has declined by 20% globally. And since 1970, as industrial production has exploded, nature’s productivity has plummeted across the board. Species extinction is now “tens to hundreds of times higher than it has averaged over the past 10 million years,” the authors write. In The Sixth Extinction, journalist Elizabeth Kolbert documents the dizzying pace of modern ecological destruction. “Just in the past century, CO2 levels in the atmosphere have changed by as much – a hundred parts per million – as they normally do in a hundred-thousand-year glacial cycle,” she writes. “Meanwhile, the drop in ocean pH levels that has occurred over the past fifty years may well exceed anything that happened in the seas during the previous fifty million.” This past weekend, air temperatures around parts of the Arctic Ocean reached 84 degrees Fahrenheit, while the concentration of CO2 eclipsed 415 parts per million for the first time in human history. No matter how unsustainable our ancestors’ societies were, ours is infinitely worse. Amid the dying, however, the economy booms. Crop yields have increased 300% since the 1970s, per the IPBES report, and businesses are now extracting 60 billion tons of resources from the earth each year. Those resources run the gamut: oil for cars, timber for buildings, precious metals for our precious iPhones. It might be one thing if biodiversity loss were paying for better lives for everyone – an unfortunate cost of making sure everyone has a safe home, healthy food, and reliable transportation – but trends in wealth inequality tell a different story. America’s richest people have doubled their incomes since the 1970s, while working people have experienced wage stagnation and disproportionately suffered the effects of habitat loss, extreme weather, and food shortages. Given these trends, “it’s hard to make with a straight face the argument that green capitalism is going to save the planet,” Goldstein added. What seems needed is something far more radical. The world’s best scientists seem to agree. “The discourse on sustainability is changing,” Visseren-Hamakers says. “It’s now normal to talk about transformation, which is nothing less than a revolution.”

#### Economic crisis sparks widespread movements towards localized sustainability.

Trainer **’**19—Conjoint Lecturer in the School of Social Sciences, University of New South Wales (Ted, “Entering the era of limits and scarcity: the radical implications for social theory,” Journal of Political Ecology Vol. 26, 2019, dml)

In time, this pressure is likely to shift from submitting requests to the state to making demands on it, and then to taking increasing control of it. There will be increasing insistence that frivolous industries must be phased out so that scarce resources can be devoted to meeting fundamental town and regional needs. Meanwhile towns will be driven by necessity to bypass the center and take initiatives such as setting up their own farms, energy supplies and factories, thus transferring various functions out of the control of the centre. There will be increasing recognition that the local is the only level where the right decisions for self-sufficient communities can be made. In time, these shifts will lead to the transfer of functions and power from state-level agencies to the local level, leaving the center with relatively few tasks, and mainly with the role of facilitating local activities. This radical restructuring could conceivably be a smooth and peaceful process, driven by a general recognition that scarcity is making local self-governing communities the only viable option. If this happens then in effect, Stage 1 will be recognized as having constituted the revolution, essentially a cultural phenomenon, and the macroscopic structural changes in Stage 2 will be seen as a consequence of the revolution. Thus a case for Anarchist theory and practice It will be evident that the alternative social organization sketched above is a fairly common Anarchist vision (although there are also varieties that are not being advocated). The argument is that settlements enabling a high quality of life for all, despite very low resource use rates, must involve all members in thoroughly participatory deliberations regarding the design, development and running of their local productive, political and social systems. Their ethos must be non-hierarchical, cooperative and collectivist, seeking to avoid all forms of domination and to prioritize the public good. They must draw on the voluntary good will and energy of conscientious citizens who are ready to contribute generously and to identify and deal with problems informally and spontaneously, and to focus on seeking mutually beneficial arrangements with little if any need for industrial infrastructures and transport networks, bureaucracy, paid officials or politicians. Regional and wider issues will be tackled by the characteristic Anarchist mechanisms of federations and (powerless) delegates bringing recommendations back down to town meetings. The principle of 'subsidiarity' is evident in the practice of grass-roots politics, the avoidance of hierarchies, and the central role of town assemblies. The very low resource costs sustainability requires are achievable because of the proximity, diversity of functions and integration, the familiarity enabling informal communication and spontaneous action, and the elimination of many processes (e.g., transport, waste dumping, fertilizer production, packaging). In the 1930s the Spanish Anarchists in the Barcelona region showed what could be done by ordinary workers and citizens. An impressive current example is the Catalan Integral Cooperative movement (Dafermos 2017; TSW 2015a). Thousands work in hundreds of different cooperatives providing hundreds of thousands of dollars worth of food, goods and services, including unemployment and other welfare services. They operate more than twenty food 'pantries' largely via voluntary labor, handling more than a thousand products. Their goal is to build an alternative society focused on meeting needs, with no involvement of the state or market principles. Many eco-villages operate according to Anarchist principles, achieving high levels of sustainability (again see Lockyer 2017 and Grinde et al. 2018). In addition it will be evident that the discussion of transition strategy also follows Anarchist principles, especially in the notion of 'prefiguring' the new here and now within the old, not depending on the centre let alone a vanguard party, and recognizing the importance of ideas and values. The advent of GFC 2 Unfortunately the foregoing transition sequence is likely to be greatly disrupted and possibly thwarted a global financial crisis of much greater magnitude than the 2008 event. It is widely recognized that the much higher levels of debt are likely to bring on at least a serious recession, and probably worse in the next few years. The global economy is heavily dependent on petroleum supply, which is been kept up by 'fracking', but this has only been made possible by enormous debt; none of the major companies in the arena has ever made a profit. Several analysts have pointed out that the price levels necessary to make the new sources of petroleum profitable now seem to be above those necessary to enable economies to function normally. In addition, Ahmed (2017) has argued persuasively that the rapidly worsening population, food, water and ecological conditions affecting Middle Eastern petroleum suppliers are increasing their chances of becoming failed states. Meanwhile the proportion of their petroleum production they must use internally is increasing, adding to the possibility that their capacity to export will dry up within a decade. These and other deteriorating resource and ecological conditions (especially falling Energy Return on Energy Invested rates) are likely to trigger serious global economic disruption long before localist initiatives have been well enough established. Yet it is very unlikely that the kind of transition envisaged could begin unless there is major breakdown in the existing consumer-capitalist system. As long as it keeps the supermarket shelves stocked, discontent is likely to be muted, and focused on demands for more jobs and higher incomes rather than system replacement. The Goldilocks

#### War chest—Growth increases war—both funds AND motivates aggression

Lucas **Hahn 16**. Bryant University. April, 2016. Global Economic Expansion and the Prevalence of Militarized Interstate Disputes.

Economic Factors Leading to Increased Militarized Interstate Disputes Running counter to the arguments that global economic expansion has led to a decline in MIDs throughout the world, there is a large body of literature that claims the exact opposite. In particular, some authors argue that the recent declines that have been observed are a direct result of a decline in conflict after major spikes during the World Wars and the Cold War. The following section will highlight four different economic factors that are potentially leading to an increase in MIDs. These four factors include: (1) imperialism and resources, (2) the “War-Chest Proposition”, (3) Neo-Marxist views on asymmetrical trade, and (4) interdependence versus interconnectedness. 1. Imperialism and Resources The presence of imperialism between the 17th and early 20th centuries was, in a way, a precursor to globalization today. During this period of time the most developed nations worked to expand their empires and in doing so, began to connect the people of the world for the first time. However, while there were many positive benefits of this expansion, there were also many negative happenings that led to violent conflict. As Arquilla (2009, 73) frames it imperialism involved commercial practices (often supported by military force) that took advantage of the colonized people and ultimately destroyed their way of life. Thus, the increased economic expansion that was brought about in order to build the empire, often led to violent encounters. More specifically, imperialism and the conquest of particular regions was often done in an effort to gain access to that region’s natural resources. Authors such as Schneider (2014) state that undeveloped nations or regions are often subject to what he refers to as the “domestic resource curse”. Basically, during the times of imperialism, the more powerful nations would go to undeveloped areas and take whatever they wanted or needed from areas that were rich with resources5. This often involved a great deal of conflict and the native people were often exploited. In modern times, the presence of significant caches of national resources, particularly in Africa, has been shown to lead to violence as corrupt governments and warlords take advantage of those native to the area. Additionally, as Barbieri (1996) points out, conflict over resources may not be limited to an imperialist nation’s encounter with the undeveloped region. Violent conflict can also exist between the multiple nations that are competing to gain access or control over natural resources in a given area. 2. The “War Chest Proposition” Building on the previous discussion, Boehmer (2010) proposes something that he calls the “War-Chest Proposition”. He states that economic growth can lead to increased military/defense spending and that this buildup of a nation’s “war chest” may be used to pay for new or continuing military engagements (251). In other words, increased economic power often leads to greater capabilities of the nation-state as a whole. This is particularly true in terms of military capabilities and in this way, nations may thus be able to engage in more conflict. Furthermore, he argues that positive economic expansion builds up the confidence of the nation to a point where they may feel invincible and thus, engage in violent conflict that will help them to continue to expand. 3. Neo-Marxist Views on Asymmetrical Trade One of the most supported arguments against the notion that economic expansion promotes peace is that trade, brought about by economic expansion, actually increases MIDs. Many authors have in fact argued that increased economic interdependence and increased trade may have, in some ways, “cheapened war”, and thus made it easier to wage war more frequently (Harrison and Nikolaus 2012).