# 1AC-Marks R1

## FW

#### *Ethics must begin a priori*

#### [A] Empirical Uncertainty – evil demon could deceive us and inability to know others experience make empiricism an unreliable basis for universal ethics. Outweighs since it would be escapable since people could say they don’t experience the same.

#### [B] Constitutive Authority – The meta-ethic is bindingness. Practical reason is the only unescapable authority because to ask why I should be a reasoner concedes it’s authority since you’re actively reasoning.

#### [C] Naturalistic fallacy – experience only tells us what is since we can only perceive what is, not what ought to be. But it’s impossible to derive an ought from descriptive premises, so there needs to be additional a priori premises to make a moral theory.

#### That justifies universality – a] a priori principles like reason apply to everyone since they are independent of human experience and b] any non-universalizable norm justifies someone’s ability to impede on your ends i.e. if I want to eat ice cream, I must recognize that others may affect my pursuit of that end.

#### Additionally:

#### [A] Ethical frameworks are topicality interpretations of the word ought so they must be theoretically justified. Prefer on resource disparities—focusing on evidence and statistics privileges debaters with the most preround prep excluding lone-wolfs who lack huge evidence files. A debater under my framework can easily be won without any prep since minimal evidence is required. That controls the internal link to other voters because a pre-req to debating is access to the activity.

#### [B] Only universalizable reason can effectively explain the perspectives of agents – that’s the best method for combatting oppression.

Farr 02 Arnold Farr (prof of phil @ UKentucky, focusing on German idealism, philosophy of race, postmodernism, psychoanalysis, and liberation philosophy). “Can a Philosophy of Race Afford to Abandon the Kantian Categorical Imperative?” JOURNAL of SOCIAL PHILOSOPHY, Vol. 33 No. 1, Spring 2002, 17–32.

**One** of the most popular **criticism**s **of Kant’s moral philosophy is that it is too formalistic.**13 That is, the universal nature of the categorical imperative leaves it devoid of content. Such a principle is useless since moral decisions are made by concrete individuals in a concrete, historical, and social situation. This type of criticism lies behind Lewis Gordon’s rejection of any attempt to ground an antiracist position on Kantian principles. The rejection of universal principles for the sake of emphasizing the historical embeddedness of the human agent is widespread in recent philosophy and social theory. I will argue here on Kantian grounds that **although a distinction between the universal and the concrete is** a **valid** distinction, **the unity of the two is required for** an understanding of human **agency.** The attack on Kantian formalism began with Hegel’s criticism of the Kantian philosophy.14 The list of contemporary theorists who follow Hegel’s line of criticism is far too long to deal with in the scope of this paper. Although these theorists may approach the problem of Kantian formalism from a variety of angles, the spirit of their criticism is basically the same: The universality of the categorical imperative is an abstraction from one’s empirical conditions. **Kant is** often **accused of making the moral agent an abstract, empty**, noumenal **subject. Nothing could be further from the truth. The Kantian subject is** an embodied, empirical, concrete subject. However, this concrete subject has a dual nature. Kant claims in the Critique of Pure Reason as well as in the Grounding that human beings have an intelligible and empirical character.15 It is impossible to understand and do justice to Kant’s moral theory without taking seriously the relation between these two characters. The very concept of morality is impossible without the tension between the two. By “empirical character” Kant simply means that we have a sensual nature. We are physical creatures with physical drives or desires. **The** very **fact that I cannot simply satisfy my desires without considering the rightness** or wrongness **of my actions suggests that my empirical character must be held in check** by something, or else I behave like a Freudian id. My empiri- cal character must be held in check **by my intelligible character**, which is the legislative activity of practical reason. It is through our intelligible character that **we formulate principles that keep our** empirical **impulses in check.** The categorical imperative is the supreme principle of morality that is constructed by the moral agent in his/her moment of self-transcendence. What I have called self-transcendence may be best explained in the following passage by Onora O’Neill: In restricting our maxims to those that meet the test of the categorical imperative we refuse to base our lives on maxims that necessarily make our own case an exception. The reason why a universilizability criterion is morally signiﬁcant is that it makes our own case no special exception (G, IV, 404). In accepting the Categorical Imperative we accept the moral reality of other selves, and hence the possibility (not, note, the reality) of a moral community. **The Formula of Universal Law enjoins no more than that we act only on maxims that are open to others also.**16 O’Neill’s description of the universalizability criterion includes the notion of self-transcendence that I am working to explicate here to the extent that like self-transcendence, universalizable moral principles require that the individ- ual think beyond his or her own particular desires. The individual is not allowed to exclude others **as** rational **moral agents** who have the right to act as he acts in a given situation. For example, if I decide to use another person merely as a means for my own end I must recognize the other person’s right to do the same to me. I cannot consistently will that I use another as a means only and will that I not be used in the same manner by another. **Hence,** the **universalizability** criterion **is a principle of consistency and** a principle of **inclusion.** That is, in choosing my maxims **I** attempt to **include the perspective of other moral agents.**

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

#### [1] Presumption and Permissibility affirm: a] Statements are true before false since if I told you my name, you’d believe me. b] If anything is permissible, then so is the aff since there is nothing prohibiting us.

#### [2] Consequences Fail: a] Every action has infinite stemming consequences, because every consequence can cause another consequence so we can’t predict. b] Induction is circular because it relies on the assumption that nature will hold uniform and we could only reach that conclusion through inductive reasoning based on observation of past events. c] Every action is infinitely divisible, only intents unify because we commit the end point of an action – but consequences cannot determine what step of action is moral d] Yes act/omission distinction – there are infinite events occurring over which you have no control, so you can never be moral

## Advocacy

#### Thus, the plan – Resolved: The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines. CP and PICs affirm because they do not disprove my general thesis.

#### Enforcement through eliminating product patents solve- empirically proven through India to lower prices, create generics, and foster innovation

He 2019 He, Juan (Graduate Student Graduate School at Shenzhen Tsinghua University) . "Indian Patent Law and Its Impact on the Pharmaceutical Industry: What Can China Learn from India?." Innovation, Economic Development, and Intellectual Property in India and China. Springer, Singapore, 2019. 251-269./SJKS

The *Report on the Revision of the Patent Law* submitted by the Patent Law Amendment Commission in 1959,[34](https://link.springer.com/chapter/10.1007/978-981-13-8102-7_11#Fn34) which was led by Shri Justice N. Rajagopala Ayyangar, pointed out that at that time foreigners held 80% to 90% of India’s patents, of which 90% of the patented products were not manufactured in the Indian territory. Foreign companies could block the production of their patented drugs in India, causing the stagnation of the Indian domestic pharmaceutical industry. Thus, the Commission believed that the patent system had been used by multinational corporations to monopolize the market, especially in the food, pharmaceutical, and chemical industries. Market monopolies also led to high product prices. Therefore, the Commission recommended that only methods or processes in the abovementioned fields be patentable, as opposed to the Indian Patents and Designs Act of 1911, which granted patent to both product and process inventions in the pharmaceutical sector. This suggestion was adopted by the Patents Act of 1970, which has laid the foundation for the boom in India’s generic drug industry. According to the Patents Act of 1970, no patent shall be granted in respect of claims for substances intended for use or capable of being used as medicine or drug or relating to substances prepared or produced by chemical processes. The reason that the Patents Act of 1970 only grants method patents in the fields of pharmaceuticals and chemicals is because product patents have an inhibitory effect on other related research, as they can prevent others from obtaining the same products through different methods. Once product patents are granted to drugs, patentees can control the production of patented drugs and thereby unreasonably raise the prices of essential medicines.[35](https://link.springer.com/chapter/10.1007/978-981-13-8102-7_11#Fn35) Thus, the rejection of the drug product patents guaranteed that India’s generic companies could produce drugs with the same or similar composition through reverse engineering and avoid being accused of infringement. India denied product patents in the pharmaceutical sector until the expiration of the transition period of the TRIPS Agreement on January 1, 2005. The rejection of product patents in the pharmaceutical sector for more than 30 years has created an opportunity for the development of the generic drug industry in India. After comparing drug prices among India, the United Kingdom, Malaysia, and Nigeria, before and after the Indian Patents Act of 1970, R.B. Saxena, consultant at the Indian Council for Research on International Economic Relations, found[36](https://link.springer.com/chapter/10.1007/978-981-13-8102-7_11#Fn36) that the prices of pharmaceutical products in India were highest before the enactment of the Patents Act of 1970 and that in 1987 the prices in India for commonly used drugs, such as analgin tablets, doxycycline capsules, diazepam tablets, and metronidazole tablets, were low compared to those of other countries. The research also found that some of the important new drugs could be introduced into India with a time lag ranging between only 4 and 6 years. Thus, Saxena pointed out that the changes relating to process patenting incorporated in the Indian Patents Act of 1970 had benefited Indian consumers in terms of prices paid for drugs and medicines and, meanwhile, it also became possible to produce many new pharmaceutical products in India much faster than what could have been otherwise.

## Offense

#### The categorical imperative rejects the idea of intellectual property as it suppresses freedom by preventing others from innovating and suppressing speech in the name of a copyright.

Pievatolo 10 Pievatolo, Maria. “Freedom, Ownership and Copyright: Why Does Kant Reject the Concept of Intellectual Property?” *Freedom, Ownership and Copyright: Why Does Kant Reject the Concept of Intellectual Property?*, 7 Feb. 2010, bfp.sp.unipi.it/chiara/lm/kantpisa1.html. SJEP

In the Metaphysics of Morals, Kant seems to take for granted that the objects of real rights are only corporeal entities or res corporales: «Sache ist ein Ding, was keiner Zurechnung fähig ist. Ein jedes Object der freien Willkür, welches selbst der Freiheit ermangelt, heiß daher Sache (res corporalis)». [32](http://bfp.sp.unipi.it/chiara/lm/kantpisa1.html#ftn.id2478823) Theoretically, however, such a negative definition could have been appropriate to incorporeal things as well. According to Kant, the rightful possession of a thing should be distinguished from its sensible possession. Something external would be rightfully mine «only if I may assume that i could be wronged by another's use of a thing even though I am not in possession of it» (AA.06 [245:13-16](http://virt052.zim.uni-duisburg-essen.de/Kant/aa06/245.html)). The rightful possession is an intelligible, not sensible, relation. I can claim that my bicycle is mine only if I am entitled to require that nobody takes it even when I leave it alone in the backyard. Kant's theory of property is very different from Fichte's principle of property as explained in his 1793 essay, according to which we are the rightful owners of a thing, the appropriation of which by another is physically impossible. For this reason, according to Fichte, the originality of the exposition entitles an author to claim a rightful property on his work. Is it really so obvious that originality implies property? Property is a comfortable social convention that allows us to avoid to quarrel all the time over the use of material objects. It is so comfortable just because it is physically possible to appropriate things; we do not need to invoke property when something cannot be separated from someone. I say both that my fingerprints or my writing style are "mine" and that my bicycle is "mine". But these two "mine" have a different meaning: the former is the "mine" of attribution; the latter is the "mine" of property. The former can be used to identify someone, and conveys the historical circumstance that something is related exclusively to someone; the latter points only to an accidental relation with an external thing, if we consider it from a physical point of view. It is possible to lie on a historical circumstance, by plagiarizing a text, i.e. by attributing it to a person who did not wrote it. However, properly speaking, no one can "steal" the historical connection between "my" writing style and me: the convention of property is useless, in this case. Besides, if Fichte's principle were the only justification of property right, it would undermine the very concept of it: as it is physically possible to "attribute" my bicycle to another, when I leave it alone in the backyard, everyone would be entitled to take it for himself. As Kant would have said, a legal property right cannot be founded on sensible situations, but only on intelligible relations. Although he defines things as res corporales, Kant determines the rightful possession of a thing as a possession without detentio, by ignoring all its sensible facets. Such a possession - a possession of a thing without holding it - is exerted on an object that is "merely distinct from me", regardless of its position in space and time. Space and time, indeed, are sensible determinations and should be left out of consideration. According to the postulate of practical reason with regard to rights, property is justified by a permissive law of reason: [33](http://bfp.sp.unipi.it/chiara/lm/kantpisa1.html#ftn.id2533469) if a rightful possession were not possible, every object would be a res nullius and nobody would be entitled to use it. Kant implicitly denies that a res nullius can be used by everyone at the same time. His tacit assumption suggests that the objects of property, besides being distinct from the subjects, are excludable and rivalrous as well, just like the res corporales. Kant asserts that something external is mine if I would be wronged by being disturbed in my use of it even though I am not in possession of it (AA.6, [249:5-7](http://virt052.zim.uni-duisburg-essen.de/Kant/aa06/249.html)). If property is a merely intelligible relation with an object that is simply distinct from the subject, we have no reason to deny that such an object might be immaterial as well, just like the objects of intellectual property. Why, then, does Kant refrain from using the very concept of it? According to him, a speech is an action of a person: it belongs to the realm of personal rights. A person who is speaking to the people is engaging a relationship with them; if someone else engages such a relationship in his name, he needs his authorization. The reprinter, as it were, does not play with property: he is only an agent without authority. Speeches, by Kant, cannot be separated from persons: he has seen the unholy promised land of intellectual property without entering it. According to Kant, before the acquired rights, everyone has a moral capacity for putting others under obligation that he calls innate right or internal meum vel tuum (AA.06, [237:24-25](http://virt052.zim.uni-duisburg-essen.de/Kant/aa06/237.html)). The innate right is only one: freedom as independence from being constrained by another's choice, insofar it can coexist with the freedom of every other in accordance with a universal law. Freedom belongs to every human being by virtue of his humanity: in other words, it has to be assumed before every civil constitution, because it is the very possibility condition of law. Freedom implies innate equality, «that is, independence from being bound by others to more than one can in turn bind them; hence a human being's quality of being his own master (sui iuris), as well as being a human being beyond reproach (iusti) since before he performs any act affecting rights he has done no wrong to anyone, and finally his being authorized to do to others anything that does not in itself diminish what is theirs, so long as they do not want to accept it - such things as merely communicating his thoughts to them.» (AA.06, [237-238](http://virt052.zim.uni-duisburg-essen.de/Kant/aa06/237.html)) [34](http://bfp.sp.unipi.it/chiara/lm/kantpisa1.html#ftn.id2533617) In spite of his intellectual theory of property, [35](http://bfp.sp.unipi.it/chiara/lm/kantpisa1.html#ftn.id2533628) Kant does not enter in the realm of intellectual property for a strong systematic reason. Liberty of speech is an important part of the innate right of freedom. It cannot be suppressed without suppressing freedom itself. If the ius reale were applied to speeches, a basic element of freedom would be reduced to an alienable thing, making it easy to mix copyright protection and censorship. [36](http://bfp.sp.unipi.it/chiara/lm/kantpisa1.html#ftn.id2533656) Property rights are based on the assumption that its objects are excludable and rivalrous and need to be appropriated by someone to be used. We cannot, however, deal with speeches as they were excludable and rivalrous things that need to be appropriated to be of some use, because excluding people from speeches would be like excluding them from freedom. Therefore, Kant binds speeches to the persons and their actions, and limits the scope of copyright to publishing, or, better, to the publishing of the age of print: the Nachdruck is unjust only when someone reproduces a text without the author's permission and distributes its copies to the public. If someone copies a book for his personal use, or lets others do it, or translates and elaborates a text, there is no copyright violation, just because it is not involved any intrinsic property right, but only the exercise of the innate right of freedom. The boundary of Kant's copyright is the public use of reason, as a key element of a basic right that should be recognized to everyone. Kant does not stick to the Roman Law tradition because of conservatism, but because of Enlightenment.

#### IPP unjustifiably restricts agents from setting and pursuing ends in healthcare because patents prevent people from taking part in scientific advancements in medicine – that violates freedom in multiple ways

**Hale 18** (Zachary Hale, 4-4-2018, accessed on 8-22-2021, The Arkansas Journal of Social Change and Public Service, "Patently Unfair: The Tensions Between Human Rights and Intellectual Property Protection - The Arkansas Journal of Social Change and Public Service", <https://ualr.edu/socialchange/2018/04/04/patently-unfair/>) BHHS AK

Although the right to the protection of “moral and material interests resulting from any scientific, literary, or artistic production,”[32] is a human right as defined in the UDHR and the ICESCR, the current system of intellectual property protection conflicts with and even violates rights that are considered to be fundamental to human life. Although intellectual property instruments are certainly used to violate essential civil and political freedoms like the freedom of expression, and economic and social freedoms like the freedom to share in the scientific advancements of society, the most blatant violations of human rights caused by intellectual property protection occur in the fields of nutrition, healthcare, and culture.[33] Of these essential entitlements, the rights to food and health are made even more significant by their relationship to the most fundamental of all human rights: the right to life.

#### [2] IPP is inconsistent with free market principles

**Kinsella 11** (Stephan Kinsella, 5-25-2011, accessed on 8-23-2021, Foundation for Economic Education, "How Intellectual Property Hampers the Free Market | N. Stephan Kinsella", <https://fee.org/articles/how-intellectual-property-hampers-the-free-market/>) BHHS AK

But are they? There are good reasons to think that IP is not actually property—that it is actually antithetical to a private-property, free-market order. By intellectual property, I mean primarily patent and copyright. It’s important to understand the origins of these concepts. As law professor Eric E. Johnson notes, “The monopolies now understood as copyrights and patents were originally created by royal decree, bestowed as a form of favoritism and control. As the power of the monarchy dwindled, these chartered monopolies were reformed, and essentially by default, they wound up in the hands of authors and inventors.” Patents were exclusive monopolies to sell various goods and services for a limited time. The word patent, historian Patricia Seed explains, comes from the Latin patente, signifying open letters. Patents were “open letters” granted by the monarch authorizing someone to do something—to be, say, the only person to sell a certain good in a certain area, to homestead land in the New World on behalf of the crown, and so on. It’s interesting that many defenders of IP—such as patent lawyers and even some libertarians—get indignant if you call patents or copyright a monopoly. “It’s not a monopoly; it’s a property right,” they say. “If it’s a monopoly then your use of your car is a monopoly.” But patents are State grants of monopoly privilege. One of the first patent statutes was England’s Statute of Monopolies of 1624, a good example of truth in labeling. Granting patents was a way for the State to raise money without having to impose a tax. Dispensing them also helped secure the loyalty of favorites. The patentee in return received protection from competition. This was great for the State and the patentee but not for competition or the consumer. In today’s system we’ve democratized and institutionalized intellectual property. Now anyone can apply. You don’t have to go to the king or be his buddy. You can just go to the patent office. But the same thing happens. Some companies apply for patents just to keep the wolves at bay. After all, if you don’t have patents someone might sue you or reinvent and patent the same ideas you are using. If you have a patent arsenal, others are afraid to sue you. So companies spend millions of dollars to obtain patents for defensive purposes. Large companies rattle their sabers or sue each other, then make a deal, say, to cross-license their patents to each other. That’s fine for them because they have protection from each other’s competition. But what does it do to smaller companies? They don’t have big patent arsenals or a credible countersuit threat. So patents amount to a barrier to entry, the modern version of mercantilist protectionism. What about copyright? The roots literally lie in censorship. It was easy for State and church to control thought by controlling the scribes, but then the printing press came along, and the authorities worried that they couldn’t control official thought as easily. So Queen Mary created the Stationer’s Company in 1557, with the exclusive franchise over book publishing, to control the press and what information the people could access. When the charter of the Stationer’s Company expired, the publishers lobbied for an extension, but in the Statute of Anne (1710) Parliament gave copyright to authors instead. Authors liked this because it freed their works from State control. Nowadays they use copyright much as the State originally did: to censor and ban books. (More below.) IP, American Style The American system of IP began with the U.S. Constitution. Article 1, Section 8, Clause 8 authorizes (but doesn’t require) Congress “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” Despite modern IP proponents’ claims to the contrary, the American founders did not view intellectual property as a natural right but only as a policy tool to encourage innovation. Yet they were nervous about monopoly privilege, which is why patents and copyrights were authorized only for a limited time. Even John Locke, whose thought influenced the Founding Fathers, did not view copyright and patent as natural rights. Nor did he maintain that property homesteading applied to ideas. It applied only to scarce physical resources. Granted, some state constitutions had little versions of copyright before the American Constitution. (See Tom W. Bell, Intellectual Privilege: Copyright, Common Law, and the Common Good, part 1, chapter 3, section B.1.) On occasion, the language of natural rights was used to defend it, but this was just cover for the monopolies they granted to special interests. Natural rights do not expire after 15 years. Natural rights are not extended to Americans only. Natural rights wouldn’t exclude many types of innovation and intellectual creativity and cover only a few arbitrary types. And what is the result of this system? In the case of patents we have a modern statute administered by a huge federal bureaucracy that grants monopolies on the production and trade of various things, which means holders may ask the federal courts to order the use of force to stop competitors. But the competitors have not done anything that justifies force. They merely have used information to guide their actions with respect to their own property. Is that compatible with private property and the free market?

#### That affirms: Free market economies are the only ones that allow people to be free to pursue their own interests.

**Richman 12** [Sheldon Richman, 8-5-2012, "The Free Market Doesn't Need Government Regulation," Reason, <https://reason.com/2012/08/05/the-free-market-doesnt-need-government-r/>] // SJ AME

What regulates the conduct of these people? Market forces. (I keep specifying "in a freed market" because in a state-regulated economy, competitive market forces are diminished or suppressed.) Economically speaking, people cannot do whatever they want—and get away with it—in a freed market because other people are free to counteract them and it's in their interest to do so. That's part of what we mean by market forces. Just because the government doesn't stop a seller from charging $100 for an apple doesn't mean he or she can get that amount. Market forces regulate the seller as strictly as any bureaucrat could—even more so, because a bureaucrat can be bribed. Whom would you have to bribe to win an exemption from the law of supply and demand? (Well, you might bribe enough legislators to obtain protection from competition, but that would constitute an abrogation of the market.) It is no matter of indifference whether state operatives or market forces do the regulating. Bureaucrats, who necessarily have limited knowledge and perverse incentives, regulate by threat of physical force. In contrast, market forces operate peacefully through millions of cooperating participants, each with intimate knowledge of her own personal circumstances and looking out for her own well-being. Bureaucratic regulation is likely to be irrelevant or (more likely) inimical to what people in the market care about. Not so regulation by market forces.

## UV

#### 1] Aff gets 1AR theory since the neg can be infinitely abusive and I can’t check back. It’s drop the debater since the 1ar is too short to win both theory and substance. No RVI or 2NR paradigm issues since they’d dump on it for 6 minutes and my 3-minute 2AR is spread too thin. Competing interps since reasonability is arbitrary and bites judge intervention.

#### Only the plan can solve covid access – inequalities heighten the risk of mutations and uneven development.

Kumar 21 [Rajeesh; Associate Fellow at the Institute, currently working on a project titled “Emerging Powers and the Future of Global Governance: India and International Institutions.” He has PhD in International Organization from Jawaharlal Nehru University, New Delhi. Prior to joining MP-IDSA in 2016, he taught at JamiaMilliaIslamia, New Delhi (2010-11& 2015-16) and University of Calicut, Kerala (2007-08). His areas of research interest are International Organizations, India and Multilateralism, Global Governance, and International Humanitarian Law. He is the co-editor of two books;Eurozone Crisis and the Future of Europe: Political Economy of Further Integration and Governance (London: Palgrave Macmillan, 2014); and Islam, Islamist Movements and Democracy in the Middle East: Challenges, Opportunities and Responses (Delhi: Global Vision Publishing, 2013); “WTO TRIPS Waiver and COVID-19 Vaccine Equity,” IDSA Issue Briefs; <https://idsa.in/issuebrief/wto-trips-waiver-covid-vaccine-rkumar-120721>] Justin

According to Duke Global Health Innovation Center, which monitors COVID-19 vaccine purchases, rich nations representing just 14 per cent of the world population have bought up to 53 per cent of the most promising vaccines so far. As of 4 July 2021, the high-income countries (HICs) purchased more than half (6.16 billion) vaccine doses sold globally. At the same time, the low-income countries (LICs) received only 0.3 per cent of the vaccines produced. The low and middle-income countries (LMICs), which account for 81 per cent of the global adult population, purchased 33 per cent, and COVAX (COVID-19 Vaccines Global Access) has received 13 per cent.10 Many HICs bought enough doses to vaccinate their populations several times over. For instance, Canada procured 10.45 doses per person, while the UK, EU and the US procured 8.18, 6.89, and 4.60 doses per inhabitant, respectively.11 Consequently, there is a significant disparity between HICs and LICs in vaccine administration as well. As of 8 July 2021, 3.32 billion vaccine doses had been administered globally.12 Nonetheless, only one per cent of people in LICs have been given at least one dose. While in HICs almost one in four people have received the vaccine, in LICs, it is one in more than 500. The World Health Organization (WHO) notes that about 90 per cent of African countries will miss the September target to vaccinate at least 10 per cent of their populations as a third wave looms on the continent.13 South Africa, the most affected African country, for instance, has vaccinated less than two per cent of its population of about 59 million. This is in contrast with the US where almost 47.5 per cent of the population of more than 330 million has been fully vaccinated. In Sub-Saharan Africa, vaccine rollout remains the slowest in the world. According to the International Monetary Fund (IMF), at current rates, by the end of 2021, a massive global inequity will continue to exist, with Africa still experiencing meagre vaccination rates while other parts of the world move much closer to complete vaccination.14 This vaccine inequity is not only morally indefensible but also clinically counter-productive. If this situation prevails, LICs could be waiting until 2025 for vaccinating half of their people. Allowing most of the world’s population to go unvaccinated will also spawn new virus mutations, more contagious viruses leading to a steep rise in COVID-19 cases. Such a scenario could cause twice as many deaths as against distributing them globally, on a priority basis. Preventing this humanitarian catastrophe requires removing all barriers to the production and distribution of vaccines. TRIPS is one such barrier that prevents vaccine production in LMICs and hence its equitable distribution. TRIPS: Barrier to Equitable Health Care Access The opponents of the waiver proposal argue that IPR are not a significant barrier to equitable access to health care, and existing TRIPS flexibilities are sufficient to address the COVID-19 pandemic. However, history suggests the contrary. For instance, when South Africa passed the Medicines and Related Substances Act of 1997 to address the HIV/AIDS public health crisis, nearly 40 of world’s largest and influential pharma companies took the South African government to court over the violation of TRIPS. The Act, which invoked the compulsory licensing provision, allowed South Africa to produce affordable generic drugs.15 The Big Pharma also lobbied developed countries, particularly the US, to put bilateral trade sanctions against South Africa.16 Similarly, when Indian company Cipla decided to provide generic antiretrovirals (ARVs) to the African market at a lower cost, Big Pharma retaliated through patent litigations in Indian and international trade courts and branded Indian drug companies as thieves.17 Another instance was when Swiss company Roche initiated patent infringement proceedings against Cipla’s decision to launch a generic version of cancer drug, “erlotinib”. Though the Delhi High Court initially dismissed Roche's appeal by citing “public interest” and “affordability of medicines,” the continued to pressure the generic pharma companies over IPR. 18 Likewise, Pfizer’s aggressive patenting strategy prevented South Korea in developing pneumonia vaccines for children.19 A recent document by Médecins Sans Frontières (MSF), or Doctors Without Borders, highlights various instances of how IP hinders manufacturing and supply of diagnostics, medical equipment, treatments and vaccines during the COVID-19 pandemic. For instance, during the peak of the COVID-19 first wave in Europe, Roche rejected a request from the Netherlands to release the recipe of key chemical reagents needed to increase the production of diagnostic kits. Another example was patent holders threatening producers of 3D printing ventilators with patent infringement lawsuits in Italy.20 The MSF also found that patents pose a severe threat to access to affordable versions of newer vaccines.21 The opponents of the TRIPS waiver also argue that IP is the incentive for innovation and if it is undermined, future innovation will suffer. However, most of the COVID-19 medical innovations, particularly vaccines, are developed with public financing assistance. Governments spent billions of dollars for COVID-19 vaccine research. Notably, out of $6.1 billion in investment tracked up to July 2021, 98.12 per cent was public funding.22 The US and Germany are the largest investors in vaccine R&D with $2.2 billion and $1.5 billion funding. Private companies received 94.6 per cent of this funding; Moderna received the highest $956.3 million and Janssen $910.6 million. Moreover, governments also invested $50.9 billion for advance purchase agreements (APAs) as an incentive for vaccine development. A recent IMF working paper also notes that public research institutions were a key driver of the COVID-19 R&D effort—accounting for 70 per cent of all COVID-19 clinical trials globally.23 The argument is that vaccines are developed with the support of substantial public financing, hence there is a public right to the scientific achievements. Moreover, private companies reaped billions in profits from COVID-19 vaccines. One could argue that since the US, Germany and other HICs are spending money, their citizens are entitled to get vaccines first, hence vaccine nationalism is morally defensible. Nonetheless, it is not the case. The TRIPS Agreement includes several provisions which mandates promotion of technology transfer from developed countries to LDCs. For instance, Article 7 states that "the protection and enforcement of IP rights should contribute to the promotion of technological innovation and the transfer and dissemination of technology, to the mutual advantage of producers and users of technical knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations."24 Similarly, Article 66.2 also mandates the developed countries to transfer technologies to LDCs to enable them to create a sound and viable technological base. The LMICs opened their markets and amended domestic patent laws favouring developing countries’ products against this promise of technology transfer. Another argument against the proposed TRIPS waiver is that a waiver would not increase the manufacturing of COVID-19 vaccines. Indeed, one of the significant factors contributing to vaccine inequity is the lack of manufacturing capacity in the global south. Further, a TRIPS waiver will not automatically translate into improved manufacturing capacity. However, a waiver would be the first but essential step to increase manufacturing capacity worldwide. For instance, to export COVID-19 vaccine-related products, countries need to ensure that there are no IP restrictions at both ends – exporting and importing. The market for vaccine materials includes consumables, single-use reactors bags, filters, culture media, and vaccine ingredients. Export blockages on raw materials, equipment and finished products harm the overall output of the vaccine supply chain. If there is no TRIPS restriction, more governments and companies will invest in repurposing their facilities. Similarly, the arguments such as that no other manufacturers can carry out the complex manufacturing process of COVID-19 vaccines and generic manufacturing as that would jeopardise quality, have also been proven wrong in the past. For instance, in the early 1990s, when Indian company Shantha Biotechnics approached a Western firm for a technology transfer of Hepatitis B vaccine, the firm responded that “India cannot afford such high technology vaccines… And even if you can afford to buy the technology, your scientists cannot understand recombinant technology in the least.”25 Later, Shantha Biotechnics developed its own vaccine at $1 per dose, and the UNICEF (United Nations Children’s Emergency Fund) mass inoculation programme uses this vaccine against Hepatitis B. In 2009, Shantha sold over 120 million doses of vaccines globally. India also produces high-quality generic drugs for HIV/AIDS and cancer treatment and markets them across the globe. Now, a couple of Indian companies are in the last stage of producing mRNA (Messenger RNA) vaccines.26 Similarly, Bangladesh and Indonesia claimed that they could manufacture millions of COVID-19 vaccine doses a year if pharmaceutical companies share the know-how.27 Recently, Vietnam also said that the country could satisfy COVID-19 vaccine production requirements once it obtains vaccine patents.28 Countries like the United Arab Emirates (UAE), Turkey, Cuba, Brazil, Argentina and South Korea have the capacity to produce high-quality vaccines but lack technologies and know-how. However, Africa, Egypt, Morocco, Senegal, South Africa and Tunisia have limited manufacturing capacities, which could also produce COVID-19 vaccines after repurposing. Moreover, COVID-19 vaccine IPR runs across the entire value chain – vaccine development, production, use, etc. A mere patent waiver may not be enough to address the issues related to its production and distribution. What is more important here is to share the technical know-how and information such as trade secrets. Therefore, the existing TRIPS flexibilities, such as compulsory and voluntary licensing, are insufficient to address this crisis. Further, compulsory licensing and the domestic legal procedures it requires is cumbersome and not expedient in a public health crisis like the COVID-19 pandemic. India’s Role in Ensuring Vaccine Equity India's response to COVID-19 at the global level was primarily two-fold. First, its proactive engagements in the regional and international platforms. Second, its policies and programmes to provide therapeutics and vaccines to the world. Since the beginning of the COVID-19 pandemic, India has been advocating international cooperation and policy coordination in fighting it. For instance, in April 2020, India co-sponsored a UN resolution that called for fair and equitable access to essential medical supplies and future vaccines to COVID-19. Later, in October 2020, India also put pressure on developed countries with a joint WTO proposal for TRIPS waiver. India’s Vaccine Maitri initiative also aims vaccine equity. As of 29 May 2021, India has supplied 663.698 lakh doses of COVID-19 vaccines to 95 countries. It includes 107.15 lakh doses as a gift to more than 45 countries, 357.92 lakh doses by commercial sales, and 198.628 lakh doses to the COVAX facility.29 The COVAX initiative aims to ensure rapid and equitable access to COVID-19 vaccines for all countries, regardless of their income level. India has decided to supply 10 million doses of the vaccine to Africa and one million to the UN health workers under the COVAX facility. India has also removed the IPR of Covaxin that would help platforms like C-TAP once WHO and developed countries’ regulatory bodies approve the vaccine. If agreed, the waiver would benefit India in many ways. First, more vaccines will help the country to control the pandemic and its recurring waves. Second, it will be a boost to India's pharma industry, particularly the generic medicine industry. According to the Biotechnology Innovation Organization, 834 unique active compounds are involved in the current R&D of COVID-19 therapeutics, vaccines, and diagnostics. It means that thousands of new patents are awaited, and that will hinder India's ability to produce COVID-19 related medical products. Only through a waiver, this challenge can be addressed. Similarly, scientists note that mRNA is the future of vaccine technology. However, manufacturing mRNA vaccines involves complex processes and procedures. Only a very few Indian manufacturers have access to this technology; however, that too is limited. Once Indian companies have access to mRNA technology, it will help country’s generic medicine industry and boost India’s economy. Therefore, even if the WTO agrees on a waiver for a period shorter than proposed, India should accept it. In addition, mRNA vaccines can be produced in lesser time compared to the traditional vaccines. While traditional vaccines’ production takes four to five months, mRNA needs only six to eight weeks. Access to this technology will be vital for India in expediting the fight against COVID-19 and future pandemics. Finally, a waiver may strengthen India's diplomatic soft power. At present, what hinders India's Vaccine Maitri initiative is the scarcity of vaccines at home. On the other hand, China is increasing its standing in Africa, South America and the Pacific through vaccine diplomacy. The WHO approval of the Chinese vaccines and lack of access to vaccines by most developing countries, opens up huge space for China to do its vaccine diplomacy. Here, India should convince its Quad partners, particularly Australia and Japan, who oppose the waiver that vaccine production in developing countries through TRIPS waiver will enable the grouping to deliver its pledged billion doses of COVID-19 vaccine in the Indo-Pacific region. In short, the proposed waiver, if agreed, will help India in addressing the public health crisis by producing more vaccines and distributing them at home; economically, by boosting its generic pharmaceutical industry, and diplomatically, providing vaccines to the developing and least-developed countries. Therefore, India should use all available means and methods, from trade-offs to pressurising, to make the waiver happen.

#### Delays alter the trajectory of case numbers – CPs miss the boat because patents were never designed for emergencies.

Kelly 9/23 [Christine; 9/23/21; Infectious diseases doctor, clinical fellow in public health virology and founding member of Doctors for Vaccine Equity; “Government must support waiver of Covid vaccine patents,” The Irish Times, <https://www.irishtimes.com/opinion/government-must-support-waiver-of-covid-vaccine-patents-1.4682160>] Justin

The World Health Organisation (WHO) has set a global vaccination targets, starting with 10 per cent coverage by the end of September 2021. This is the level required to protect the most vulnerable people in populations – these groups that we worried about in Ireland at the start of the pandemic such as the elderly. In low-income countries alone, achieving even this first critical target requires the administration of about 52 million vaccine courses. In Ireland we have learned that delays can markedly alter the trajectory of virus case numbers and deaths. Those of us working in infection specialities have seen this before. Hesitancy in the rollout of HIV treatment to Africa in the early 2000s led to millions of extra infections and associated deaths, the legacy of which we are still dealing with today. History is repeating itself with Covid-19, where we now have an intervention that is extremely effective at preventing death but is not accessible in low-income countries. Healthcare workers – already a scarce resource in the Global South – are risking their own health going to work each day, in the knowledge that their colleagues in richer countries have long been afforded the protection of a vaccine. Leaving a large proportion of the world’s population unvaccinated, with ensuing viral replication and transmission, creates ideal circumstances for the generation of viral mutations. In a world which is increasingly interconnected economically, politically and socially, allowing transmissions and deaths to continue exacerbates the impact of the global pandemic for everyone. The opportunity to access vaccines has been unequal for countries in the Global South from the outset. Those wanting to buy vaccines were outcompeted by large Global North powers. Covax was set up with the aim of supporting equitable vaccine distribution, but donations from participating nations (who may have received vaccines from Covax themselves) have fallen markedly short of their pledges. Vaccine hoarding by wealthy nations is part of the problem; the British Medical Journal reported in August that just 10 countries could have an accumulated surplus of 3.8 billion doses of Covid-19 vaccines by the end of the year. Many countries have already begun to roll out booster doses to the general population, often with a perspective that neglects international priorities. Medical practitioners know that choosing not to act is a conscious decision. We call upon the Government to choose to act in this global health crisis. Current levels of donations will not provide the number of vaccines needed and will serve only to deepen a power imbalance between rich and poor countries built on paternalism and dependence; the foundations of colonialism. It is essential that booster programmes take into consideration the risk of diverting vaccines from global populations who have not already been vaccinated Strict international intellectual property rules are currently blocking vaccine production. The Trips waiver (trade-related aspects of intellectual property rights) is a temporary suspension of intellectual property designed for use in situations such as this, where global security is threatened and is already being backed by many countries including the United States. As highlighted in Nature in March: “Arguably the strongest argument for a temporary waiver is that patents were never designed for use during global emergencies such as wars or pandemics.”

#### Current vaccination rates aren’t enough to meet targets – expansion of vaccine nationalism and imperialist exploitation.

Jimenez 9/22 [Darcy; 9/22/21; Healthcare Reporter; “Big pharma fuelling human rights crisis over Covid-19 vaccine inequity, says Amnesty,” Pharmaceutical Technology, <https://www.pharmaceutical-technology.com/features/big-pharma-human-rights-crisis-vaccine-covid-19-inequity-amnesty/>] Justin

Major Western Covid-19 vaccine manufacturers are “causing human rights harms” by prioritising wealthy countries and refusing to share intellectual property (IP) and technology, Amnesty International have said in a report published today. The human rights group has accused six companies – Pfizer, BioNTech, Moderna, AstraZeneca, Johnson & Johnson and Novavax – of neglecting their responsibility to respect human rights by failing to fairly allocate vaccine doses across the globe. In the 64-page report, the organisation also cites unfair prices and a lack of transparency regarding contracts, pricing and technology as contributing factors to the desperate vaccine inequity seen in poorer countries. “Despite receiving billions of dollars in government funding and advance orders which effectively removed risks normally associated with the development of medicines, vaccine developers have monopolised intellectual property, blocked technology transfers, and lobbied aggressively against measures that would expand the global manufacturing of these vaccines,” it said. “Some companies – Pfizer, BioNTech and Moderna – have so far delivered almost exclusively to rich countries, putting profit before access to health for all.” According to the report, 98% of all Pfizer-BioNTech vaccine deliveries had been allocated to high- and upper-middle-income countries at the beginning of September. Amnesty said this is also the case for 88% of jabs from Moderna, which is yet to deliver a single dose to a low-income country. Vaccine hoarding and inequality While almost six billion Covid-19 vaccine doses have been administered worldwide so far – and wealthier countries have begun vaccinating children and offering additional booster jabs – a measly 0.3% of shots have been distributed to the world’s poorest nations. Around 55% of people in rich countries are fully vaccinated against coronavirus, compared to fewer than 1% in lower-income nations, Amnesty highlighted. The report acknowledged that rich states have hoarded supplies of Covid-19 vaccines, but said that vaccine makers have “played a decisive role in limiting global vaccine production and obstructing fair access to a life-saving health product” by refusing to take measures that would boost global vaccine supply. Since the start of the pandemic, several initiatives have been launched to tackle vaccine scarcity by sharing knowledge and technology. To date, the companies mentioned in Amnesty’s report have refused to take part in these schemes and remain opposed to the temporary waiver of vaccine IP proposed at the World Trade Organization (WTO) by India and South Africa last year. Biopharma trade associations have argued that waiving vaccine IP would undermine innovation in drug development. In April, Biotechnology Innovation Organization president and CEO Michelle McMurry-Heath argued in a guest editorial for The Economist that the WTO proposal “destroys the incentive for companies to take risks to find solutions for the next health emergency”. 100 days to act Alongside the publication of its report, Amnesty has launched a global campaign giving countries and pharmaceutical companies 100 days – until the end of the year – to meet the World Health Organization’s target of vaccinating 40% of the population of low and lower-middle income countries. The group is urging countries to “redistribute hundreds of millions of excess vaccine doses currently sitting idle”, and wants vaccine makers to ensure that at least 50% of doses produced are delivered to low and lower-middle income countries. Amnesty International’s secretary general Agnès Callamard said: “Vaccinating the world is our only pathway out of this crisis. Now should be time to hail these companies – who created vaccines so quickly – as heroes. “But instead – and to their shame – big pharma’s intentional blocking of knowledge transfer and their wheeling and dealing in favour of wealthy states has brewed an utterly devastating vaccine scarcity for so many others. “Their actions are plunging parts of Latin America, Africa and Asia into renewed crises, pushing weakened health systems to the very brink and causing tens of thousands of preventable deaths every week. In many low-income countries not even health workers or at-risk people have received the vaccine. “Against the backdrop of these gross inequalities, BioNTech, Moderna and Pfizer are set to make $130bn combined by the end of 2022. “Profits should never come before lives.”

#### Yes scale-up for COVID.

---AT: IP already waived

Erfani et al. 8/3 [Parsa Erfani, Agnes Binagwaho, Mohamed Juldeh Jalloh, Muhammad Yunus, Paul Farmer, Vanessa Kerry; 8/3/21; Harvard Medical School, Boston, USA 2 University of Global Health Equity, Rwanda 3 Sierra Leone 4 Yunus Centre, Bangladesh 5 Global Health and Social Medicine, Harvard Medical School, Boston, USA 6 Division of Global Health Equity, Brigham and Women’s Hospital, USA 7 Partners In Health, USA 8 Seed Global Health, USA 9 Program in Global Public Policy and Social Change, Harvard Medical School, Boston, USA 10 Division of Pulmonary and Critical Care Medicine, Massachusetts General Hospital, USA; “*Intellectual property waiver for covid-19 vaccines will advance global health equity*,” BMJ, <https://www.bmj.com/content/bmj/374/bmj.n1837.full.pdf>] Justin

What effect would a waiver have? Contrary to detractors’ concerns about the possible effect of a temporary TRIPS waiver, global health analyses suggest that it will be vital to equitable and effective action against covid-19. LMIC’s manufacturing capabilities have been underestimated, even though several LMICs have the scientific and manufacturing capacity to produce complex covid-19 vaccines. India, Egypt, and Thailand are already manufacturing viral vector or mRNA-based covid-19 vaccines,8 -10 and vaccine production lines could be established within months in some other LMICs,11 offering substantial benefit in a pandemic that will last years.11 Companies in India and China have already developed complex pneumococcal and hepatitis B recombinant vaccines, challenging existing vaccine monopolies.12 The World Health Organization launched an mRNA technology transfer hub in April 2021 to provide the logistical, training, and know-how support needed for manufacturers in LMICs to repurpose or expand existing manufacturing capacity to produce covid-19 vaccines and to help navigate accessing IP rights for the technology.13 Twenty five respondents from LMICs expressed interest, and South Africa was selected as the first hub, with plans to start producing the vaccine through the Biovac Institute in the coming months.14 Removing IP barriers through the waiver will facilitate these efforts, more rapidly enable future hubs, engage a greater number of manufacturers, and ultimately yield more doses faster. Moreover, as the waiver facilitates vaccine production, demand for raw materials and active ingredients will increase. Coupled with pre-emptive planning to anticipate and expand raw material production, the waiver—which encompasses the IP of all covid-19 vaccine-related technology— can offer a path to overcome bottlenecks and expand production of necessary vaccine materials. Current licensing mechanisms inadequate Voluntary licences have not and will not keep pace with public health demand. Since companies determine the terms of voluntary licences, they are often granted to LMICs that can afford them, leaving out poorer regions.10 For example, in South Asia, AstraZeneca has voluntarily licensed its vaccine to the Serum Institute of India, even though the region has multiple capable vaccine manufacturers.9 Many covid-19 vaccine developers have not taken steps towards licensing their technologies, simply because there is limited financial incentive to do so.11 To date, none have shared IP protected vaccine information with the WHO Covid-19 Technology Access Pool (C-TAP) established last year.15 Relying on the moral compass of companies that answer to shareholders to voluntarily license their technologies will have limited effect on vaccine equity. Their market is driven by profit margins, not public health. Compulsory licensing by LMICs will also be insufficient in rapidly expanding vaccine production, as each patent licence must be negotiated separately by each country and for each product based on its own merit. From 1995 to 2016, 108 compulsory licences were attempted and only 53 were approved.6 The case-by-case approach is slow and not suitable for a global crisis that requires swift action. In addition, TRIPS requires compulsory licences to be used predominantly for domestic supply, limiting exports of the licensed goods to nearby low income countries without production capacity.5 Although a “special” compulsory licence system was agreed in the Doha declaration to allow for expeditious exportation and importation (formalised as the article 31bis amendment to TRIPS in 2017), the provision is limited by cumbersome logistical procedures and has been rarely used.16 Governments may also be hesitant to pursue compulsory licences as high income countries have previously bullied them for doing so. Since India first used compulsory licensing for sorafenib tosylate in 2012 (reducing the cancer drug’s price by 97%), the US has consistently pressured the country not to use further compulsory licences.17 During this pandemic, Gilead sued the Russian government for issuing a compulsory licence for remdesivir.18 Furthermore, while compulsory licences are primarily for patents, covid-19 vaccines often have other types of IP, including trade secrets, that are integral for production.19 The emergency TRIPS waiver removes all IP as a barrier to starting production (not just patents) and negates the prolonged time, inconsistency, frequent failure, and political pressure that accompany voluntary licensing and compulsory licensing efforts. It also provides an expeditious path for new suppliers to import and export vaccines to countries in need without bureaucratic limitations. Finally, there is no compelling evidence that the proposed TRIPS waiver would dismantle the IP system and its innovation incentives. The waiver is restricted to covid-19 related goods and is time limited, helping to protect future innovation. It would, however, reduce profit margins on current covid-19 vaccines. With substantial earnings in the first quarter of 2021, many drug companies have already recouped their research and development costs for covid-19 vaccines.20 However, they have not been the sole investors in vaccine development, and they should not be the only ones to profit. Most vaccines received a substantial portion of their direct funding from governments and not-for-profit organisations—and for some, such as Moderna and Novavax, nearly all.21 Decades of publicly funded research have laid the groundwork for current innovations in the background technologies used for vaccines.22 Given that companies were granted upfront risk protection for covid-19 vaccine research and development, a waiver that advances global public health but reduces vaccine profits in a global crisis is reasonable. Knowledge transfer An IP waiver for covid-19 vaccines is integral to boosting vaccine supply, breaking vaccine monopolies, and making vaccines more affordable in LMICs. It is, however, only a first, but necessary, step. Originator companies must transfer vaccine technology and share know-how with C-TAP, transfer hubs, or individual manufacturers to help suppliers begin production.23 In addition, governments must leverage domestic law, private sector incentives, and contract terms with pharmaceutical companies to compel companies to cooperate with such transfers.24 If necessary, governments can require technology transfers in exchange for continuing enterprise in a country or avoiding penalties. Politicians and leaders are at a critical juncture: they will either take the necessary steps to make vaccine technology available to scale production, stimulate global collaboration, and create a path to equity or they will protect a hierarchical system based on an economic bottom line. The former will not only build a vaccination trajectory that puts equal value on the lives of the rich and the poor, but will also help stem the pandemic’s relentless momentum and quell the emergence of variants. We are in the middle of one of the largest vaccination efforts in human history. We cannot rely on companies to thread the needle of corporate social and moral responsibility with shareholder and stock value returns nor expect impacted governments to endure lengthy bureaucratic licensing processes in this time of crisis. It will be a legacy of apathy and unnecessary death. As the human impact of the proposed IP waiver becomes clear, consensus behind it is growing. Countries that previously opposed the waiver—such as the US and Brazil—now support written text based negotiations.7 Opposing countries must stop blocking the waiver, engage in transparent text negotiations, and commit to reaching consensus swiftly. The longer states stall, the more people die needlessly. Covid-19 has repeatedly shown that people without access to resources such as strong health systems, health workers, medicines, and vaccines will preferentially fall ill and die. For too long, this cycle has been “other people’s” problem. It is not. It is our problem.

#### That escalates security threats – extinction.

---AT: Cooperation Thesis

RECNA et al. 21 [Research Center for Nuclear Weapon Abolition; Nagasaki, Japan; “Pandemic Futures and Nuclear Weapon Risks: The Nagasaki 75th Anniversary pandemic-nuclear nexus scenarios final report,” Journal for Peace and Nuclear Disarmament; 5/28/21; <https://www.tandfonline.com/doi/full/10.1080/25751654.2021.1890867>] Justin

The Challenge: Multiple Existential Threats The relationship between pandemics and war is as long as human history. Past pandemics have set the scene for wars by weakening societies, undermining resilience, and exacerbating civil and inter-state conflict. Other disease outbreaks have erupted during wars, in part due to the appalling public health and battlefield conditions resulting from war, in turn sowing the seeds for new conflicts. In the post-Cold War era, pandemics have spread with unprecedented speed due to increased mobility created by globalization, especially between urbanized areas. Although there are positive signs that scientific advances and rapid innovation can help us manage pandemics, it is likely that deadly infectious viruses will be a challenge for years to come. The COVID-19 is the most demonic pandemic threat in modern history. It has erupted at a juncture of other existential global threats, most importantly, accelerating climate change and resurgent nuclear threat-making. The most important issue, therefore, is how the coronavirus (and future pandemics) will increase or decrease the risks associated with these twin threats, climate change effects, and the next use of nuclear weapons in war.5 Today, the nine nuclear weapons arsenals not only can annihilate hundreds of cities, but also cause nuclear winter and mass starvation of a billion or more people, if not the entire human species. Concurrently, climate change is enveloping the planet with more frequent and intense storms, accelerating sea level rise, and advancing rapid ecological change, expressed in unprecedented forest fires across the world. Already stretched to a breaking point in many countries, the current pandemic may overcome resilience to the point of near or actual collapse of social, economic, and political order. In this extraordinary moment, it is timely to reflect on the existence and possible uses of weapons of mass destruction under pandemic conditions – most importantly, nuclear weapons, but also chemical and biological weapons. Moments of extreme crisis and vulnerability can prompt aggressive and counterintuitive actions that in turn may destabilize already precariously balanced threat systems, underpinned by conventional and nuclear weapons, as well as the threat of weaponized chemical and biological technologies. Consequently, the risk of the use of weapons of mass destruction (WMD), especially nuclear weapons, increases at such times, possibly sharply. The COVID-19 pandemic is clearly driving massive, rapid, and unpredictable changes that will redefine every aspect of the human condition, including WMD – just as the world wars of the first half of the 20th century led to a revolution in international affairs and entirely new ways of organizing societies, economies, and international relations, in part based on nuclear weapons and their threatened use. In a world reshaped by pandemics, nuclear weapons – as well as correlated non-nuclear WMD, nuclear alliances, “deterrence” doctrines, operational and declaratory policies, nuclear extended deterrence, organizational practices, and the **existential risks** posed by retaining these capabilities – are all up for redefinition. A pandemic has potential to destabilize a nuclear-prone conflict by incapacitating the supreme nuclear commander or commanders who have to issue nuclear strike orders, creating uncertainty as to who is in charge, how to handle nuclear mistakes (such as errors, accidents, technological failures, and entanglement with conventional operations gone awry), and opening a brief opportunity for a first strike at a time when the COVID-infected state may not be able to retaliate efficiently – or at all – due to leadership confusion. In some nuclear-laden conflicts, a state might use a pandemic as a cover for political or military provocations in the belief that the adversary is distracted and partly disabled by the pandemic, increasing the risk of war in a nuclear-prone conflict. At the same time, a pandemic may lead nuclear armed states to increase the isolation and sanctions against a nuclear adversary, making it even harder to stop the spread of the disease, in turn creating a pandemic reservoir and transmission risk back to the nuclear armed state or its allies. In principle, the common threat of the pandemic might induce nuclear-armed states to reduce the tension in a nuclear-prone conflict and thereby the risk of nuclear war. It may cause nuclear adversaries or their umbrella states to seek to resolve conflicts in a cooperative and collaborative manner by creating habits of communication, engagement, and mutual learning that come into play in the nuclear-military sphere. For example, militaries may cooperate to control pandemic transmission, including by working together against criminal-terrorist non-state actors that are trafficking people or by joining forces to ensure that a new pathogen is not developed as a bioweapon. To date, however, the COVID-19 pandemic has increased the isolation of some nuclear-armed states and provided a textbook case of the failure of states to cooperate to overcome the pandemic. Borders have slammed shut, trade shut down, and budgets blown out, creating enormous pressure to focus on immediate domestic priorities. Foreign policies have become markedly more nationalistic. Dependence on nuclear weapons may increase as states seek to buttress a global re-spatialization6 of all dimensions of human interaction at all levels to manage pandemics. The effect of nuclear threats on leaders may make it less likely – or even impossible – to achieve the kind of concert at a global level needed to respond to and administer an effective vaccine, making it harder and even impossible to revert to pre-pandemic international relations. The result is that some states may proliferate their own nuclear weapons, further reinforcing the spiral of conflicts contained by nuclear threat, with cascading effects on the risk of nuclear war.