## 1AC

### Framework

#### The meta-ethic is moral substitutability - only it can explain reasons for acting.

Sinnott-Armstrong 92 [Walter, professor of practical ethics. “An Argument for Consequentialism” Dartmouth College Philosophical Perspectives. 1992.]

A moral reason to do an act is consequential if and only if the reason depends only on the consequences of either doing the act or not doing the act. For example, a moral reason not to hit someone is that this will hurt her or him. A moral reason to turn your car to the left might be that, if you do not do so, you will run over and kill someone. A moral reason to feed a starving child is that the child will lose important mental or physical abilities if you do not feed it. All such reasons are consequential reasons. All other moral reasons are non-consequential. Thus, a moral reason to do an act is non-consequential if and only if the reason depends even partly on some property that the act has independently of its consequences. For example, an act can be a lie regardless of what happens as a result of the lie (since some lies are not believed), and some moral theories claim that that property of being a lie provides amoral reason not to tell a lie regardless of the consequences of this lie. Similarly, the fact that an act fulfills a promise is often seen as a moral reason to do the act, even though the act has that property of fulfilling a promise independently ofits consequences. All such moral reasons are non-consequential. In order to avoid so many negations, I will also call them 'deontological'. This distinction would not make sense if we did not restrict the notion of consequences. If I promise to mow the lawn, then one consequence of my mowing might seem to be that my promise is fulfilled. One way to avoid this problem is to specify that the consequences of an act must be distinct from the act itself. My act of fulfilling my promise and my act of mowing are not distinct, because they are done by the same bodily movements.10 Thus, my fulfilling my promise is not a consequence of my mowing. A consequence of an act need not be later in time than the act, since causation can be simultaneous, but the consequence must at least be different from the act. Even with this clarification, it is still hard to classify some moral reasons as consequential or deontological,11 but I will stick to examples that are clear. In accordance with this distinction between kinds of moral reasons, I can now distinguish different kinds of moral theories. I will say that a moral theory is consequentialist if and only if it implies that all basic moral reasons are consequential. A moral theory is then non-consequentialist or deontological if it includes any basic moral reasons which are not consequential. 5. Against Deontology So defined, the class of deontological moral theories is very large and diverse. This makes it hard to say anything in general about it. Nonetheless, I will argue that no deontological moral theory can explain why moral substitutability holds. My argument applies to all deontological theories because it depends only on what is common to them all, namely, the claim that some basic moral reasons are not consequential. Some deontological theories allow very many weighty moral reasons that are consequential, and these theories might be able to explain why moral substitutability holds for some of their moral reasons: the consequential ones. But even these theories cannot explain why moral substitutability holds for all moral reasons, including the non-consequential reasons that make the theory deontological. The failure of deontological moral theories to explain moral substitutability in the very cases that make them deontological is a reason to reject all deontological moral theories. I cannot discuss every deontological moral theory, so I will discuss only a few paradigm examples and show why they cannot explain moral substitutability. After this, I will argue that similar problems are bound to arise for all other deontological theories by their very nature. The simplest deontological theory is the pluralistic intuitionism of Prichard and Ross. Ross writes that, when someone promises to do something, 'This we consider obligatory in its own nature, just because it is a fulfillment of a promise, and not because of its consequences.'12 Such deontologists claim in effect that, if I promise to mow the grass, there is a moral reason for me to mow the grass, and this moral reason is constituted by the fact that mowing the grass fulfills my promise. This reason exists regardless of the consequences of mowing the grass, even though it might be overridden by certain bad consequences. However, if this is why I have a moral reason to mow the grass, then, even if I cannot mow the grass without starting my mower, and starting the mower would enable me to mow the grass, it still would not follow that I have any moral reason to start my mower, since I did not promise to start my mower, and starting my mower does not fulfill my promise. Thus, a moral theory cannot explain moral substitutability if it claims that properties like this provide moral reasons.

#### Non-consequentialist moral theories fail to explain.

Sinnott-Armstrong 92 [Walter, professor of practical ethics. “An Argument for Consequentialism” Dartmouth College Philosophical Perspectives. 1992.]

Of course, there are many other versions of deontology. I cannot discuss them all. Nonetheless, these examples suggest that it is the very nature of deontological reasons that make **deontological theories unable to explain moral substitutability**. This comes out clearly if we start from the other side and ask which properties create the moral reasons that are derived by moral substitutability. **What gives me a moral reason to start the mower is the consequences of starting the mower.** Specifically**, it has the consequence that I am able to mow the grass.** This reason cannot derive from the same property as my moral reason to mow the lawn unless what gives me a moral reason to mow the lawn is *its* consequences. **Thus any non-consequentialist moral theory will have to posit two distinct kinds of moral reasons: one for starting the mower, and another for mowing the grass. Once these kinds of reasons are separated, we need to understand the connection between them. But this connection cannot be explained by the substantive principles of the theory**. That is why all deontological theories must lack the explanatory coherence which is a general test of adequacy for all theories.

#### The standard is maximizing expected well-being.

Consequentialism SPEC: NEC (necessary enabler consequentialism) – all moral reasons for acts are provided by facts that the acts are necessary enablers for preventing death.

#### Prefer:

#### 1. Actor Specificity:

#### a. No act-omission distinction—governments are responsible for everything in the public sphere so inaction is implicit authorization of action: they have to yes/no bills, which means everything collapse to aggregation.

#### b. No intent-foresight distinction – the actions we take are inevitably informed by predictions from certain mental states, meaning consequences are a collective part of the will.

#### c. Comes first since different agents have different ethical standings. Takes out util calc indicts since they’re empirically denied and link turns them because the alt would be no action.

#### 2. Extinction comes first under any framework.

Pummer 15 [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

#### a. Gateway issue - we need to be alive to assign value and debate competing moral theories.

#### b. no moral theory can allow for extinction because it means the end of value.

### Plan

**Plan: The member nations of the World Trade Organization ought to reduce intellectual property protections for COVID-19 medicines. To clarify – this also waives TRIPs. If needed - we will defend trade sanctions as enforcement and a permanent waiver for patents.**

### Adv

#### Scenario 1 – Pandemics

#### Variants are increasingly more lethal – if unchecked they mean extinction. Global access to the vaccine is key.

**Kavanagh 21** Kevin. “The Delta Variant Is the Biggest Public Health Threat We Have Faced. Here's How to Beat It.” Journal, Louisville Courier Journal, 4 Aug. 2021, www.courier-journal.com/story/opinion/2021/08/04/delta-variant-biggest-public-health-threat-we-have-faced/5424054001/. //NCS-LB

Now faced with a fifth wave of COVID-19 about to suffocate our nation, many of us are starting to realize COVID-19 is here to stay. Herd immunity is no longer an option. Waves of variants are sweeping the world and learning how to evade immunity. SARS-CoV-2 has also learned how to infect a wide range of animal species, giving it a lasting reservoir to reinfect our communities. We must change our lives and adapt to this new reality; we need to be honest with ourselves but most importantly we need to protect and be honest with others. Individuality will not succeed with an ever-changing virus. The [delta variant](https://www.courier-journal.com/story/news/2021/07/26/covid-19-delta-variant-kentucky-how-to-watch-beshear-update/8090806002/) is the greatest public health threat our nation has ever faced, and it is just the harbinger of things to come, as the kappa and lambda variants are quietly waiting their turn. We cannot solely vaccinate our way out of this. We must also implement stringent public health strategies to slow down the spread and mutation of this virus, including universal access to N-95 masks and upgrading building ventilation. In that way, our pharmaceutical development and production can catch up with the emerging variants. The new mRNA vaccines are a medical miracle, and we can develop a new vaccine within weeks. The challenge is in producing and distributing hundreds of millions of doses and placing them into arms. Related:[Delta variant worries hospital leaders across Kentucky as beds fill with the unvaccinated](https://www.courier-journal.com/story/news/local/2021/08/02/delta-variant-covid-19-hospital-admissions-increase-across-kentucky/5415576001/) We need to be honest with the public. The public is keenly astute at ferreting out the truth and when they do our leaders lose credibility. The current vaccines prevent death and reduce hospitalizations; this is a huge plus and everyone needs to become vaccinated. But they also can cause breakthrough infections. [Data from Israel](https://www.nejm.org/doi/full/10.1056/NEJMoa2109072) reports that 19% of mild and asymptomatic vaccine breakthrough infections with the alpha variant had persistent symptoms at six weeks. [Multiple studies](https://www.webmd.com/lung/news/20200811/asymptomatic-covid-silent-but-maybe-not-harmless) have demonstrated CT scan changes in the lungs in approximately 50% of patients with asymptomatic infections. It also needs to be remembered that COVID-19 is as much a [heart and vascular disease](https://www.infectioncontroltoday.com/view/is-covid-19-primarily-a-heart-and-vascular-diseases) as it is a lung disease. Often myocarditis is initially asymptomatic, only presenting with symptoms decades later. Almost every organ of the body is affected by COVID-19, it is not the seasonal flu. The virus will continue to mutate and may eventually escape the vaccine’s protection. We need to remember that SARS one, the deadly virus that ravaged Asia in 2003, is a coronavirus which also uses the ACE2 receptor in cellular entry. Thus, our current COVID virus may undergo many more immunity evading iterations and still maintain its infectivity. The first step in successfully living with this virus is to stop the misinformation; it is actually placing the whole world at risk. Masks work. Yes, the size of the virus as measured by electron microscopy is much smaller than the filtration capacity of a high grade N95 mask, but the [viral particles](https://www.nejm.org/doi/full/10.1056/NEJMc2007800?query=featured_home) extruded by someone in the air are much larger, since they are coated with mucous and water. Masks mechanically block the larger particles and can even electrostatically capture the smaller ones. COVID-19 delta variant:[Here's how JCPS plans on keeping kids safe when classes begin](https://www.courier-journal.com/story/news/education/2021/08/03/covid-19-delta-variant-how-jcps-plans-keep-kids-safe-when-classes-begin/5404600001/) It is a numbers’ game. It is highly unlikely you will be infected by exposure to just one viron. The fewer virons you are exposed to, the less likely you are to develop an infection, and if you do the infection will probably be less severe. Much of the confusion we witnessed during previous COVID-19 waves was the result of misinformation, reduced access to health care and a patchwork availability of the vaccines. Our entire health care system needs to follow the same script and to be able to quickly and uniformly adapt to an ever-changing pandemic. The United States needs a nationwide system for public health education, testing, case tracking, treatment and vaccine rollout. To this end, the largest health care system in the United States is the Department of Veterans Affairs (VA). The VA has three well-known missions: research, education and clinical care. But what is not widely known is that the VA has a [fourth mission](https://youtu.be/oBtNJeoNW2k): to provide aid and support to the entire nation during health care emergencies. During the COVID-19 pandemic, the VA outsourced more than 1,000 health care staff to community nursing homes and non-VA facilities, and they hospitalized more than 400 non-veterans at VA facilities. The VA has also taken a leadership role in implementing effective COVID-19 strategies, exemplified by their being the first federal cabinet to require employee vaccinations. With the VA’s large infrastructure and fourth mission mandate, it is the obvious vehicle to implement a nationwide public health care system. Finally, we need to remember that infectious diseases have brought down civilizations and driven species to extinction. What makes our modern society different is our knowledge of science, but if we choose to ignore and not use our capabilities, we are then no better off than a tadpole. We need to embrace and invest in a new normal. This virus is not going to miraculously go away.

**Countries blocking waiver now - plan solves - WTO IP rules are the barrier to scaled-up vaccine production.**

**Pandey 21**, Ashutosh. “Rich Countries Block India, South Africa's Bid to Ban COVID Vaccine Patents.” DW.COM, 2 Apr. 2021, www.dw.com/en/rich-countries-block-india-south-africas-bid-to-ban-covid-vaccine-patents/a-56460175.

The World Trade Organization (WTO) talks on a proposal by India and South Africa to temporarily suspend intellectual property (IP) rules related to COVID-19 vaccines and treatments hit a roadblock on Thursday after wealthy countries balked at the idea, Germany's dpa news agency reported. The two developing countries say the IP waiver will allow drugmakers in poor countries to start production of effective vaccines sooner. India and South Africa had approached the global trade body in October, calling on it to waive parts of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). The suspension of rights such as patents, industrial designs, copyright and protection of undisclosed information would ensure "**timely access to affordable medical products including vaccines and medicines or to scaling-up of research, development, manufacturing and supply of medical products essential to combat COVID**-19," they said. The proposal was vehemently opposed by wealthy nations like the US and Britain as well as the European Union, who said that a ban would stifle innovation at pharmaceutical companies by robbing them of the incentive to make huge investments in research and development. This would be especially counterproductive during the current pandemic which needs the drugmakers to remain on their toes to deal with a mutating virus, they argue. The WTO talks are taking place as some wealthy countries face criticism for **cornering billions** of COVID shots — many times the size of their populations — while **leaving poor countries** struggling for supplies. **Experts say the global scramble for vaccines, or vaccine nationalism, risks prolonging the pandemic.** "We have to recognize that this virus knows no boundaries, it travels around the globe and the response to it should also be global. It should be based on international solidarity," said Ellen 't Hoen, the director of Medicines Law & Policy — a nonprofit campaigning for greater access to medicines. "Many of the large-scale vaccine manufacturers are based in developing countries. All the production capacity that **exists should be exploited**…and that does require the sharing of Not enough production capacity Supporters of the waiver, which include dozens of developing and least-developed countries and NGOs, said the WTO's IP rules were acting as a **barrier to urgent scale-up of production of vaccines** and other much needed medical equipment in poor countries.

#### Studies show that extinction rates for variants dramatically increase as viruses develop.

**Schiøler 21**, Henrik, et al. “Mathematical Modelling of Sars-Cov-2 Variant Outbreaks Reveals Their Probability of Extinction.” MedRxiv, Cold Spring Harbor Laboratory Press, 1 Jan. 2021, www.medrxiv.org/content/10.1101/2021.07.05.21260005v1.full.pdf+html.

Pandemic outbreaks have reentered as a global reality and threat to humanity with the transmission of an animal-adapted Corona virus to humans, first detected in Wuhan, China in late 2019, leading to the COVID-19 pandemic exhibiting frequent severe respiratory problems in humans. Early warnings of a global event were seen with SARS and avian flu [3, 7]. In both cases early containment measures proved successful, whereas for SARS-CoV-2 early containment failed and the strategy transferred to mitigation. This pattern has later been re-observed in almost all countries at the early stages of COVID-19 introduction across national borders. Lately, human-animal transmission has given rise to grave concerns regarding a re-ignition of the pandemic through 1 All rights reserved. No reuse allowed without permission. (which was not certified by peer review) is the author/funder, who has granted medRxiv a license to display the preprint in perpetuity. medRxiv preprint doi: https://doi.org/10.1101/2021.07.05.21260005; this version posted July 6, 2021. The copyright holder for this preprint NOTE: This preprint reports new research that has not been certified by peer review and should not be used to guide clinical practice. resistant mutations cultivated in animal reservoirs [9]. One such example is the discovery of the Cluster-5 mutation in humans transferred from farmed mink in the Danish fur industry during the summer of 2020 [2]. National and global health concerns triggered severe disease containment measures, such as the rapid culling of the entire Danish 17 million large stock of mink as well as relatively severe social- and travel-restrictions for seven municipalities in the North Denmark Region (approx. 281,000 people). Containment measures were, for various reasons, delayed for around four weeks, in which there were no observations of Cluster-5 mutations in a subset of polymerase chain reaction (PCR) tested samples subjected to whole genome sequencing (WGS). This has lead to the obvious question, for how long should Cluster-5 be absent from test samples before its extinction is sufficiently certain? The answer depends on the epidemiological behaviour of the disease during restrictions as well as the testing regime imposed in that period. We aim in this paper to provide a Bayesian model-based answer to this question which links epidemiological parameters as well as testing patterns and test results to the probability of disease extinction and early detection. Various modeling levels exist in epidemiology such as compartment models, aggregate Markov models, and individual Markov models [1]. Whereas the former two, including the well known SIR and SEIR models [5], are well suited to model the epidemic spread for large populations during mitigation, the latter provides higher precision for small amounts of infected during containment. Other recent investigations have been made to model the early epidemic evolution of SARS-CoV-2, employing auto-regressive modeling with a Bayesian approach to parameter estimation [8]. Such models provide mean value predictions but do not give the probabilistic output as requested above. The scale of genomic surveillance needed for early detection of newly emerging variants of concern (VoC) has been considered through a model of the sampling process including the PCR test quality parameters [10]. However, in this model, only the output model is considered, in contrast to our model, where also the epidemic dynamics are included. Furthermore, results are given as expected counts in contrast to the probabilistic results of our approach. A generalized Hidden Markovian model framework for epidemic evolution and test has also been employed [11]. One may consider the model class used in this paper as a subset of that model, tailored specifically to early epidemic development, which brings about a much required computational tractability even for large populations. We shall shortly introduce the development from individual models to compartment models to facilitate the transfer of model parameters between them. The model is generic and can therefore be used in other situations when pathogen mutations are entered from, e.g., animal reservoirs. 2 Results The derivation of the epidemic spread and measurement model was motivated by the spread of mink mutations in the North Denmark Region. Before returning to this, we will formulate the model and study its usability and robustness by running a number of intervention scenarios. In the following we will consider interventions as a combination of restrictions, bringing the reproduction number down, and intensified PCR and WGS sequencing. 2 All rights reserved. No reuse allowed without permission. (which was not certified by peer review) is the author/funder, who has granted medRxiv a license to display the preprint in perpetuity. medRxiv preprint doi: https://doi.org/10.1101/2021.07.05.21260005; this version posted July 6, 2021. The copyright holder for this preprint 2.1 Probability of extinction Assume a situation where we have observed y infected people carrying a variant we want to keep under control and an effective contamination strategy of infected people and their immediate contacts has been invoked. The question is now:, for how long shall we retain the restrictions to be reasonably sure that the virus has not spread? I.e., we want to calculate the following probability p(xk = 0 | y0 = y, y1 = 0, . . . , yk = 0), k = 1, 2, 3, . . . , where xk and yk are, respectively, the hidden (true) and observed number of infected people carrying the variant at time k. In the Methods section, we have formulated a discrete time hidden Markov model to model this situation where the development of the number of infected people, with the specific variant of interest, follows a birth-death process with death rate (herein recovery rate) γ and net reproduction rate R0. The net reproduction rate is defined as the ratio of the birth rate (herein infection rate) versus the death rate, i.e., R0 = β/γ. We assume a two-step testing strategy where nk of the population of size N, are PCR tested and mk of the PCR positive tests are WGS tested at time point k. In the following, we compute a number of scenarios which illustrate how various intervention strategies will influence the time until a certain probability of extinction has been reached, given the specific variant has not been observed for a given period of time. In all simulations, we assume a constant recovery time of two weeks, i.e. γ = 0.5, a population size of N = 600, 000, n = 10, 000 tests per week, and an initial number of infected people with the specific variant of 11 as well as a flat prior distribution on the number of specific cases. These numbers were picked to mimic the Cluster-5 outbreak in the North Denmark Region, where 11 cases were observed in a population of size approximately 600,000. Thereafter, we simulated increased restrictions by lowering stepwise the reproduction rate, R0, from 1.5 to 0.5. Finally, we studied increased WGS testing rate of positives between 25% and 100%. In Figure 1, Panel A shows the probability of extinction as a function of the number of weeks for increasing WGS ratio and a constant reproduction rate of R0 = 1.0, and Panel B shows the probability of extinction as function of the number of weeks for increasing reproduction rates and constant WGS rate of 0.25. Time to the probability of extinction for all scenarios can be seen in Table 1. From numerical results, we see that an increase in the ratio of WGS tests dramatically lowers the number of weeks from 42 to 25 before we can conclude a probability of extinction of 90%. We also noticed a counter intuitive non-monotone relationship between reproduction rate and number of weeks until a certain probability of extinction has been achieved. To investigate this further, we computed the number of weeks to a 85%, 90%, and 95% probability of extinction and depicted the number of weeks to extinction against increasing reproduction rates, ranging from 0.5 to 2.5, see Figure 2. From this we notice the maximum of weeks to probability of extinction emerging for reproduction rates R0 slightly less than one, and decreasing for higher values. We are aware that it is impossible to set all parameters for a given situation. We have therefore made an online Shiny App which can be used to compute the interested reader’s own scenarios, please refer to the Data availability section.

#### Extinction – defense is wrong

Piers Millett 17, Consultant for the World Health Organization, PhD in International Relations and Affairs, University of Bradford, Andrew Snyder-Beattie, “Existential Risk and Cost-Effective Biosecurity”, Health Security, Vol 15(4), http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028

Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization.

A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6

While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and theWestern Abenaki (which suffered a staggering 98% loss of population).

In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-2

#### Reject their Pharma hacks – the waiver boosts vaccine capacity and distribution – ensures mass immunization and prevents future pandemics.

**Baker 21**, Brook. “Third-Way Proposals from Big Pharma and the WTO Are the Same-Old Way – Commercial Control of Supply, Price, and Distribution.” Health Gap, Apr. 2021, healthgap.org/wp-content/uploads/2021/05/Baker.The-Third-Way-is-the-Same-Old-Way-Final1.pdf. //JQ

Adopting the waiver would greatly change countries’ bargaining power with industry and, if need be, allow countries to authorize “generic” production of key COVID-19 health technologies to fulfill unmet need. It would give legal certainty for private and public investments in local and regional biopharmaceutical manufacturing capacity in the Global South. Moreover, if widely implemented and supported with investments, the waiver could allow the kinds of North-South and South-South cooperation that could result in the establishment of sustainable longer-term biopharmaceutical capacity operating at efficient economies-of-scale that would be able to address future pandemic threats and other unmet medical needs. Support for the waiver has grown by leaps and bounds with 60 countries now co-sponsoring and another 60 or so countries indicating support. In addition, at least 10 US Senators and another 100 Members of Congress have supported the proposal as have over 400 Members of the European Parliament and national parliamentarians. Likewise, the Pope, 175 former heads of state and Nobel Prize winners, and hundreds of civil society organizations in the U.S. alone have supported the waiver proposal. The end goal of these initiatives is to move the tools needed to end the pandemic to the global commons instead of private enclosures. More specifically, the goal is to increase and distribute sustainable global manufacturing capacity and enable full and open technology transfer of mRNA and other vaccine platforms, antivirals, and biologic medicines including monoclonal antibodies. Related capacity could also be built for other medical supplies including PPE and diagnostics. This expanded capacity would in turn lead to greater self- sufficiency and more equitable access than the current rightholder-dominated approach. In instances where increased competition did not lower prices, additional price control measures could be adopted. A Renewed Industry Offensive and “Third Way” Proposals Although industry initially responded to the waiver proposal with shrugs and quips that it was “nonsense”, the rallying of support and the openness of the new Biden administration to consider the merits of the proposal has led to an industry counteroffensive. Strident op-eds and letters of alarm from PhRMA, BIO, U.S. Chamber of Commerce and others simultaneously argue that waiving IP won’t help expand supply but that protecting IP is essential to the COVID-19 response and the survival of the industry. In addition to stridently defending IP, industry asserts two other easily refuted arguments. First, Big Pharma claims that it has amassed all existing manufacturing capacity and that it has global supply needs totally under control. It estimates it can manufacture 8, 10, 12, or even 14 billion doses of vaccines in 2021. However, vaccine manufacturers were able to produce only 4% (31 million doses) of what they predicted they could produce by the end of the 2020. In the first 2+ months of 2021 (through March 5, 2021), all manufacturers, including Russian and Chinese ones, had produced only 413 million vaccine doses. Even by early April, fewer than 1 billion doses have been manufactured. Therefore it is not logical to expect that industry will be able to increase production 8-14 fold in the next nine months of 2021. Similarly, although it argues that it has scoured the global landscape and exhausted all potential sources of supply, vaccine manufacturers have rejected offers to produce additional vaccines from quality assured manufacturers in Canada, Bangladesh, and Denmark. Likewise, they have seemingly ignored unused capacity elsewhere. Second, after entering into multiple technology access agreements with contract manufacturers and building their own capacity in a few short months, Big Pharma argues that additional technology transfer to other unutilized producers would be too difficult and time consuming. To bolster this argument, Big Pharma characterizes LMIC manufacturers as technologically backward and substandard even though 72 out of 154 WHO prequalified vaccines are produced by manufacturers from developing countries, including India, China, Brazil, Cuba, Thailand, Senegal, and Indonesia. This “quality slander” occurs at the same time that vaccine rightholders have entered into multiple industry-controlled contract manufacturing agreements with companies in India and other developing countries. As part of its offensive, industry helped to organize the previously mentioned Manufacturing and Supply Chain Summit where, in its background paper, it touted illusory claims of manufacturing capacity from leading candidate vaccine producers but bemoaned upstream supply bottlenecks. Simultaneously, the Director General of the WTO proposed to pursue a “Third Way” proposal in the WTO that would help voluntary match-making “on mutually agreeable terms” between vaccine manufacturers and potential manufacturing partners. In response, on March 9, 2021, Australia, Canada, Chile, Columbia, New Zealand, Norway, and Turkey tried to deflect attention from the waiver proposal and requested to the WTO General Council that the Director General “promptly convene and hold discussion with both vaccine developers and vaccine manufacturers, as well as developers and manufacturers of other COVID-19-related medical products” to make use of unused or underutilized production capacity through mutually beneficial licensing and technology transfer agreements. At the same time, industry leaders and lobbyists have swarmed Washington and Brussels to argue their case with political leaders, simultaneously opposing the waiver but asking for additional government support. This request for resources has already resulted in at least one agreement by the Quad Alliance (U.S., India, Japan, and Australia) to invest resources in an Indian manufacturer, Biological E Ltd., to make additional doses of Johnson & Johnson’s vaccine to meet a portion of demand in Indo-Pacific region. The most recent instantiation of the industry’s Third Way approach is a proposal to create a COVID Vaccine Capacity Connector in the ACT-A Vaccine Pillar that would “(1) [connect] manufacturers to alleviate bottle necks, particularly in the fill-finish step; (2) promote bilateral technology transfers under license; and (3) facilitate multilateral technology transfer to multiple manufacturers through a technology hub approach.” The first two approaches are clearly the same-old, industry-controlled way. The third approach, originating within WHO, is potentially more promising and would seek to duplicate prior successful efforts to use a tech transfer hub that helped diffusion and expansion of influenza vaccine manufacturing capacity. Conclusion There is no doubt that the fundamental barrier to achieving global vaccination coverage is inadequate supply and skewed distribution. That problem persists because governments have left control over vaccine technologies, supply, price, and distribution solely to pharmaceutical companies. With evidence to date, there is no reason to trust industry’s self- serving assertions about their proprietary vaccine manufacturing capacity given the manufacturing mishmashes and production shortfalls we have already witnessed. To make things even worse, Europe and now India are restricting vaccine exports and the U.S. has not allowed export of any domestically produced vaccines except for 4 million doses of the Oxford/AstraZeneca vaccine to neighboring Mexico and Canada. Instead of relying on industry’s promises, the world can rely instead on common sense – an informed common sense that industry will continue to undersupply, overprice, and underserve need in poorer regions of the world. The resulting shortfalls in immunization will directly cause additional deaths, economic losses, and social disruption. Shortfalls also create a breeding ground for new variants, with the risk that already scarce vaccine capacity will be split disproportionately again between prioritizing the resurgent needs of rich countries for booster and new-variant shots while ignoring the needs of the other 80+% of the global population. This dismal prospect will thereafter extend in the future, where inadequate capacity will undermine efforts to respond to future pandemics by ignoring needs in developing countries. Countries must reject third-way/same-way, industry-controlled solutions. The world must unify to meet the urgency of the pandemic. If IP rightholders stand in the way of increased supply, affordable prices, and equitable access, their rights must be overridden so that life- saving health technologies can enter the public sphere where they belong. Industry must be driven to the bargaining table, even if they are also granted incentives for open technology transfer and even as governments and others invest in new and repurposed manufacturing capacity.

#### Scenario 2 - WTO Credibility

#### WTO credibility is draining now - the plan is key to revamp the organization as an international trade dispute mechanism.

**Meyer 21**, David. “The WTO's Survival Hinges on the COVID-19 VACCINE Patent Debate, Waiver Advocates Warn.” Fortune, Fortune, 18 June 2021, fortune.com/2021/06/18/wto-covid-vaccines-patents-waiver-south-africa-trips/.

The World Trade Organization knows all about crises. Former U.S. President Donald Trump threw a wrench into its core function of resolving trade disputes—a blocker that President Joe Biden has not yet removed—and there is widespread dissatisfaction over the fairness of the global trade rulebook. The 164-country organization, under the fresh leadership of Nigeria's Ngozi Okonjo-Iweala, has a lot to fix. However, **one crisis is more pressing than** the **others**: the battle over COVID-19 vaccines, and whether the protection of their patents and other intellectual property should be temporarily lifted to boost production and end the pandemic sooner rather than later. According to some of those pushing for the waiver—which was originally proposed last year by India and South Africa—**the WTO's future rests on what happens next.** "The credibility of the WTO will depend on its ability to find a meaningful outcome on this issue that truly ramps-up and diversifies production," says Xolelwa Mlumbi-Peter, South Africa's ambassador to the WTO. "Final nail in the coffin" The Geneva-based WTO isn't an organization with power, as such—it's a framework within which countries make big decisions about trade, generally by consensus. It's supposed to be the forum where disputes get settled, because all its members have signed up to the same rules. And one of its most important rulebooks is the Agreement on Trade-Related Aspects of Intellectual Property Rights, or TRIPS, which sprang to life alongside the WTO in 1995. The WTO's founding agreement allows for rules to be waived in exceptional circumstances, and indeed this has happened before: its members agreed in 2003 to waive TRIPS obligations that were blocking the importation of cheap, generic drugs into developing countries that lack manufacturing capacity. (That waiver was effectively made permanent in 2017.) Consensus is the key here. Although the failure to reach consensus on a waiver could be overcome with a 75% supermajority vote by the WTO's membership, this would be an unprecedented and seismic event. In the case of the COVID-19 vaccine IP waiver, it would mean standing up to the European Union, and Germany in particular, as well as countries such as Canada and the U.K.—the U.S. recently flipped from opposing the idea of a waiver to supporting it, as did France. **It's a dispute between countries, but the result will be on the WTO as a whole**, say waiver advocates. "If, in the face of one of humanity's greatest challenges in a century, the WTO functionally becomes an obstacle as in contrast to part of the solution, **I think it could be the final nail in the coffin"** **for the organization**, says Lori Wallach, the founder of Public Citizen's Global Trade Watch, a U.S. campaigning group that focuses on the WTO and trade agreements. "If the TRIPS waiver is successful, and people see the WTO as being part of the solution—saving lives and livelihoods—**it could create goodwill and momentum to address what are still daunting structural problems."** Those problems are legion. Reform needs Top of the list is the WTO's Appellate Body, which hears appeals in members' trade disputes. It's a pivotal part of the international trade system, but Trump—incensed at decisions taken against the U.S. —blocked appointments to its seven-strong panel as judges retired. The body became completely paralyzed at the end of 2019, when two judges' terms ended and the panel no longer had the three-judge quorum it needs to rule on appeals. Anyone who hoped the advent of the Biden administration would change matters was disappointed earlier this year when the U.S. rejected a European proposal to fill the vacancies. "The United States continues to have systemic concerns with the appellate body," it said. "As members know, the United States has raised and explained its systemic concerns for more than 16 years and across multiple U.S. administrations." At her confirmation hearing in February, current U.S. Trade Representative Katherine Tai reiterated those concerns—she said the appellate body had "overstepped its authority and erred in interpreting WTO agreements in a number of cases, to the detriment of the United States and other WTO members," and accused it of dragging its heels in settling disputes. "Reforms are needed to ensure that the underlying causes of such problems do not resurface," Tai said. "While the U.S. [has] been engaging [with the WTO] it hasn't indicated it would move quickly on allowing appointments to the Appellate Body," says Bryan Mercurio, an economic-law professor at the Chinese University of Hong Kong, who opposes the vaccine waiver. "This is not a good sign. In terms of WTO governance, it's a much more important step than supporting negotiations on an [intellectual property] waiver." It's not just the U.S. that wants to see reform at the WTO. In a major policy document published in February, the EU said negotiations had failed to modernize the organization's rules, the dispute-resolution system was broken, the monitoring of countries' trade policies was ineffective, and—crucially—"the trade relationship between the U.S. and China, two of the three largest WTO members, is currently largely managed outside WTO disciplines." China is one of the key problems here. It became a WTO member in 2001 but, although this entailed significant liberalization of the Chinese economy, it did not become a full market economy. As the European Commission put it in February: "The level at which China has opened its markets does not correspond to its weight in the global economy, and the state continues to exert a decisive influence on China's economic environment with consequent competitive distortions that cannot be sufficiently addressed by current WTO rules." "China is operating from what it sees as a position of strength, so it will not be bullied into agreeing to changes which it sees as not in its interests," says Mercurio. China is at loggerheads with the U.S., the EU and others over numerous trade-related issues. Its rivals don't like its policy of demanding that Chinese citizens' data is stored on Chinese soil, nor do they approve of how foreign investors often have to partner with Chinese firms to access the country's market, in a way that leads to the transfer of technological knowhow. They also oppose China's industrial subsidies. Mercurio thinks China may agree to reforms on some of these issues, particularly regarding subsidies, but "only if it is offered something in return." All these problems won't go away if the WTO manages to come up with a TRIPS waiver for COVID-19 vaccines and medical supplies, Wallach concedes. "**But**," she adds, "**the will and the good faith to tackle these challenges is increased enormously if the WTO has the experience of being part of the solution, not just an obstacle."** Wallach points to a statement released earlier this month by Asia Pacific Economic Cooperation (APEC) trade ministers, which called for urgent discussions on the waiver. "The WTO must demonstrate that global trade rules can help address the human catastrophe of the COVID-19 pandemic and facilitate the recovery," the statement read in its section about WTO reform. Okonjo-Iweala's role The WTO's new director general, whose route to the top was unblocked in early 2021 with the demise of the Trump administration, is certainly keen to fix the problems that contributed to the early departure of her predecessor, Brazil's Robert Azevedo. "We must act now to get all our ambassadors to the table to negotiate a text" on the issue of an IP waiver for COVID vaccines, Ngozi Okonjo-Iweala, director general of the World Trade Organization, has said. Dursun Aydemir—Anadolu/Bloomberg/Getty Images Earlier this week, when the U.S. and EU agreed a five-year ceasefire in a long-running dispute over Boeing and Airbus aircraft subsidies, Okonjo-Iweala tweeted: "With political will, we can solve even the most intractable problems." However, Mercurio is skeptical about her stewardship having much of an effect on the WTO's reform process. "Upon taking [over she] stated it was time for delegations to speak to each other and not simply past each other, but at the recent General Counsel meeting delegations simply read prepared statements in what some have described as the worst meeting ever," he says. "On the other hand, Ngozi is very much someone who will actively seek solutions to problems, and in this way different to her predecessor. If the role of mediator is welcomed, she could have an impact not in starting discussions but in getting deals over the finish line."

#### Perception of WTO inaction pushes states out and decks credibility - surges protectionism.

**Bradford 10** - Assistant Professor, University of Chicago Law School (Anu, “When the WTO Works, and How It Fails,” 51 Va. J. Int'l L. 1)//BB

Finally, while some attempts to conclude the Doha Round have failed because there were too many controversial issues, more recent rounds have failed partly because of the lack of inclusion of issues that would provide satisfactory net gains to all parties. The Doha negotiation agenda has now been stripped of much of its initial ambition, as states have narrowed the agenda in an effort to save the failing round. Thus, when states perceive the net benefits of a WTO round as inadequate, they are likely to **abandon the WTO** and pursue more substantial commitments with a **smaller group of like-minded trading partners**. Going forward, where does this leave the prospect of cooperation within the WTO? One possibility is that governments have already picked the low-hanging fruit and thereby satisfied the most salient needs of their powerful interest groups, leaving a dwindling pool of uncertain and contested benefits for states to negotiate. These remaining benefits are also more difficult for distinctly heterogonous trade powers to agree upon. This situation would marginalize the WTO's role with respect to future liberalization commitments and leave the institution in the role of adjudicating disputes stemming from existing agreements. 224Link to the text of the note This scenario suggests that the WTO may well have met its limits and that we are unlikely to see states incorporate new agreements into its framework. Another scenario is that the gains available through bilateral and regional trade agreements do not make the WTO obsolete. Under this scenario, one assumes that protectionism resurges and continues to span across global markets. States erect new trade barriers. Eliminating them creates losers and causes resistance, which only the WTO's facilitation of transfer payments can overcome. Opportunistic behavior continues to characterize many areas of cooperation. In these areas, the WTO is likely to remain a useful forum in which to negotiate enforceable commitments among many states. Indeed, states have few alternatives to the WTO. This view predicts that the WTO will remain the central pillar of the world trade system and continue to attract the negotiation of new issues under its umbrella. If states continue to seek trade liberalization through the WTO, however, they need to carefully weigh the costs and [56] benefits of its current decision-making structures, including its insistence on the single undertaking and its requirement that all states need to sign on to all agreements. Under either scenario, the WTO's recent inability to further its liberalization agenda highlights the need for a more focused debate on the institution's capabilities, goals, and priorities. The future prospects for cooperation within the WTO continue to **hinge** on the WTO's perceived relevance in maintaining and strengthening free trade. The discussion above not only helps shed light on the WTO's ability to foster international agreements thus far, but it may also provide a starting point for a discussion on whether and how the institution might serve states' future needs in an increasingly complex economic and political landscape.

#### Stable international trade networks prevents nuclear war and secures alliances – best theoretical studies.

**Jackson 14** (Matthew O. Jackson, William D. Eberle Professor of Economics at Stanford and Stephen M. Nei, PhD Student in Economics at Stanford, “Networks of Military Alliances, Wars, and International Trade”, October 2014, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2389300>)

This instability provides insights into the constantly shifting structures and recurring wars that occurred throughout the nineteenth and first half of the twentieth centuries.6 **Wars**, however, **have greatly subsided in parallel with the huge increase of trade** (partly coincidental with the introduction of containerized shipping in the 1960s): between 1820 and 1959 each pair of countries averaged .00056 wars per year, while from 1960 to 2000 the average was .00005 wars per year, less than one tenth as much. We see this pattern quite clearly in Figure 1.7 These changes also follow the advent of nuclear weapons, which impacted the technology of war. Indeed, we show how nuclear weapons can lead to some changes in stability, but does not generate peace on its own. Indeed, in order to capture the actual patterns that have emerged one must add other considerations - such as trade considerations - since the base model shows that networks of **alliances would not be stable with nuclear weapons but without trade**.8¶ Thus, the second part of our analysis is to enrich the base model to include international trade. Indeed, there has been a rapid increase in global trade since World War II (partly coincident with the growth of container shipping among other stimuli). The empirical relationship between war and trade is an active area of research, with strong suggestions (e.g., Martin, Mayer, and Thoenig (2008)) that network concerns may be important. So, we introduce a concept of a network of alliances being war and trade stable, which allows countries to form alliances for either economic or military considerations. In this richer model, an alliance allows countries to trade with each other and to coordinate military activities, and so can be formed for either reason. This restores existence of networks of alliances that are stable against the addition or deletion of alliances. **Trade provides two helpful incentives**: first it provides economic motivations to maintain **alliances**, and the resulting denser network of alliances then has a **deterrent effect**; and second, it can **reduce the incentives of a country to attack another** since trade will be disrupted. This **reduces the potential set of conflicts** and, together with the denser networks, allows for a rich family of stable networks that can exhibit structures similar to networks we see currently.¶ We provide some results on the existence and structure of war and trade stable networks of alliances, showing that structures similar to those observed over the past few decades are economically stable under apparently reasonable parameters. It is important to note that another dramatic change during the post-war period was the introduction of nuclear weapons, which changes the technology of war and is generally thought to have greatly increased the defensive advantage to those with such weapons.9 Our model suggests that although world-wide adoption of nuclear weapons could stabilize things in the absence of trade, it would result in an empty network of alliances as the stable network. To explain the much denser and more stable networks in the modern age along with the paucity of war in a world where nuclear weapons are limited to a small percentage of countries, our model points to the enormous growth in trade as a big part of the answer. We close the paper with some discussion of this potential role that the **growth in trade has played in reducing wars over the past half century**, and how this relates to the advent of the nuclear age.¶ Before proceeding, let us say a few words about how this paper contributes to the study of war. The literature on war provides many rationales for why wars occur. Our analysis here fits firmly into what has become a “rationalist” tradition based on cost and benefit analyses by rational actors, with roots seen in writings such as Hobbes (1651) Leviathan, and has become the foundation for much of the recent international relations literature.10¶ To our knowledge, **there are no previous models of conflict that game-theoretically model networks of alliances between multiple** agents/**countries based on costs and benefits of wars**. 11 There are previous models of coalitions in conflict settings (e.g., see Bloch (2012) for a survey). Here, network structures add several things to the picture. Our model is very much in a similar rationalist perspective of the literature that examines group conflict (e.g., Esteban and Ray (1999, 2001); Esteban and Sakovicz (2003)), but enriching it to admit network structures of alliances and of international trade. This allows us to admit patterns that are consistent with the networks of alliances that are actually observed, which are far from being partitions (e.g., the U.S. is currently allied with both Israel and Saudi Arabia, Pakistan and India, just to mention a couple of many prominent examples). More importantly, our Theorem 3 provides a first model in which such non-partitional such structures are stable and provide insight into peace. Moreover, as we already mentioned above, the observed patterns of wars and of alliances are not partitional, and so this provides an important advance in moving the models towards matching observed patterns of wars, trade and alliances.¶ Our model thus serves as a foundation upon which one can eventually build more elaborate analyses of multilateral interstate alliances, trade, and wars. It is also important to emphasize that the network of international trade is complex and can in fact be stable (and prevent conflict) precisely because it cuts across coalitions. This is in contrast to coalitional models that generally predict only the grand coalition can be stable or that very exact balances are possible (e.g., see Bloch, Sanchez-Pages, and Soubeyran (2006)). Again, this is something illustrated in our Theorem 3, and which does not exist in the previous literature. Finally, **our model illuminates the relationships between international trade, stable network structures, and peace**, something not appearing in the previous literature - as the previous literature that involves international trade and conflict generally revolves around bilateral reasoning or focuses on instability and armament (e.g., Garfinkel, Skaperdas, and Syropoulos (2014)) and does not address the questions that we address here.¶ The complex relationship between trade and conflict is the subject of a growing empirical literature (e.g., Barbieri (1996); Mansfield and Bronson (1997); Martin, Mayer, and Thoenig (2008); Glick and Taylor (2010); Hegre, Oneal, and Russett (2010)). The literature not only has to face challenges of endogeneity and causation, but also of substantial heterogeneity in relationships, as well as geography, and the level of conflict. The various correlations between conflict and trade are complex and quite difficult to interpret, **and a model such as ours that combines military and economic incentives**, and others that may follow, **can provide some structure with which to interpret** some of the **empirical observations**, as we discuss in the concluding remarks.

**Credibility solves nuclear war – trade binds opposing leaders together and deters conflict.**

**Hamann 09**, Georgia**.** “Replacing Slingshots with Swords: Implications of the Antigua-Gambling 22.6 Panel Report for Developing Countries and the World Trading System,” 2009

**Voluntary compliance with WTO rules** and procedures is of the utmost importance **to the international trading system**.'0 0 Given the increasingly globalized market, the coming years will see an increase in the importance of the WTO **as a cohesive force and arbiter of disputes that likely will become more frequent and injurious**. **01' The work of the WTO cannot be overstated in a nuclear-armed world,** as the body continues to promote respect and even amity among nations with opposing philosophical goals or modes of governance. 10 2 Demagogues in the Unites States may decry the rise of China as a geopolitical threat, 0 3 and extremists in Russia may play dangerous games of brinksmanship with other great powers, **but trade keeps politicians' fingers off "the button**. ' 10 4 **The WTO offers an astounding rate of compliance** for an organization with no standing army and no real power to enforce its decisions, suggesting that governments recognize the value of maintaining the international construct of the WTO. 105 **In order to promote voluntary compliance, the WTO must maintain a high level of credibility**. 106 Nations must perceive the WTO as the most reasonable option for dispute resolution or fear that the WTO wields enough influence to enforce sanctions. 10 7 The arbitrators charged with performing the substantive work of the WTO by negotiating, compromising, and issuing judgments are keenly aware of the responsibility they have to uphold the organization's credibility. 108

#### Extinction – nuke war fallout creates Ice Age and mass starvation.

Steven **Starr 15**. “Nuclear War: An Unrecognized Mass Extinction Event Waiting To Happen.” Ratical. March 2015. <https://ratical.org/radiation/NuclearExtinction/StevenStarr022815.html> TG

A war fought with 21st century strategic nuclear weapons would be more than just a great catastrophe in human history. If we allow it to happen, such a war would be a mass extinction event that [ends human history](https://ratical.org/radiation/NuclearExtinction/StarrNuclearWinterOct09.pdf). There is a profound difference between extinction and “an unprecedented disaster,” or even “the end of civilization,” because even after such an immense catastrophe, human life would go on. But extinction, by definition, is an event of utter finality, and a nuclear war that could cause human extinction should really be considered as the ultimate criminal act. It certainly would be the crime to end all crimes. The world’s leading climatologists now tell us that nuclear war threatens our continued existence as a species. Their studies predict that a large nuclear war, especially one fought with strategic nuclear weapons, would create a post-war environment in which for many years it would be too cold and dark to even grow food. Their findings make it clear that not only humans, but most large animals and many other forms of complex life would likely vanish forever in a nuclear darkness of our own making. The environmental consequences of nuclear war would attack the ecological support systems of life at every level. Radioactive fallout produced not only by nuclear bombs, but also by the destruction of nuclear power plants and their spent fuel pools, would poison the biosphere. Millions of tons of smoke would act to [destroy Earth’s protective ozone layer](https://www2.ucar.edu/atmosnews/just-published/3995/nuclear-war-and-ultraviolet-radiation) and block most sunlight from reaching Earth’s surface, creating Ice Age weather conditions that would last for decades. Yet the political and military leaders who control nuclear weapons strictly avoid any direct public discussion of the consequences of nuclear war. They do so by arguing that nuclear weapons are not intended to be used, but only to deter. Remarkably, the leaders of the Nuclear Weapon States have chosen to ignore the authoritative, long-standing scientific research done by the climatologists, research that predicts virtually any nuclear war, fought with even a fraction of the operational and deployed nuclear arsenals, will leave the Earth essentially uninhabitable.

#### The plan is needed to preserve and continue global trade norms, deter protectionism, and confront global crises.

**González 20**, Anabel **“**Revitalising Multilateralism: Pragmatic Ideas for the New WTO Director-General.” VOX, 10 Nov. 2020, voxeu.org/content/revitalising-multilateralism-pragmatic-ideas-new-wto-director-general.

EXTRAORDINARY TIMES DEMAND EXTRAORDINARY ACTION As of 2 November 2020, there are 46.9 million COVID-19 cases across all regions, with the number of deaths exceeding 1.2 million, and rising.2 The economic and social impacts of the pandemic and its containment measures are not less daunting. Global growth is estimated at -4.9 in 2020, with over 95% of countries projected to have negative per capita income growth (IMF 2020). Trade volumes are expected to decrease by between 13% and 32% from last year,3 while foreign direct investment flows could plunge by up to 40% (UNCTAD 2020). Is it estimated that the equivalent of 555 million jobs have been lost in the first half of this year (ILO 2020), which in turn could push up to 100 million more people into extreme poverty and would almost double the number of persons suffering from acute hunger (FAO 2020). While there is some evidence that goods trade may be rebounding and that the worst-case trade scenario projected in April could be averted (CPB 2020, WTO 2020a), the recovery from the deepest global recession since World War II will depend on the sustained and effective containment of the virus and the quality of government policies. The World Bank/IMF Development Committee warned that the pandemic has the potential to erase development gains for many countries (World Bank 2020a). Some consequences may also be long-lasting, such as lower investment, erosion of human capital, and a retreat from global trade and supply linkages (World Bank 2020b). It is no understatement to say these are extraordinary times. In many countries, governments are providing significant levels of fiscal support to try to stabilise their economies, sustain companies and minimise the impact on workers; in many others, limited fiscal space and informality constraint governments’ capacity to mitigate the damage. For advanced and developing economies alike, trade is a powerful, cost-effective tool to alleviate the devastating effects of COVID-19 on the health and economic fronts. And yet, protectionism is gaining an upper hand, deepening some of pre-pandemic confrontations that were already threatening the global economy. The short-term response to the virus and longer-term growth prospects depend on strong multilateral cooperation to scale back obstacles to trade and investment, increase business certainty and leverage opportunities which the pandemic has accelerated in areas like the digital economy. **It is also needed to preserve stable and coordinated international relations to avoid that heavy threats implicit in the pandemic could result in catastrophic disorders or conflicts** (Jean 2020). But it will not happen automatically. Unless governments accelerate their efforts to collaborate, growing protectionism and increased distortions to global value chains (GVCs) risk being a by-product of the virus, at the same time further exacerbating its negative implications. **This demands extraordinary action.** This chapter addresses the question of what role for trade ministers at the WTO in times of crises with a view to activating global cooperation to overcome COVID-19. In addition to the introductory section, the second section explores the need to reactivate the WTO to underpin collaboration among governments, the third section argues that trade ministers should call the shots during crisis, the fourth section suggests eight actions for ministers to rein in protectionism and mitigate further damage, the fifth section refers to the mechanics on how and when to do it, and a final section offers concluding remarks. **REACTIVATE THE WTO** Trade needs to be part of the response to COVID-19 and its upshots, and countries cannot afford the WTO, hobbled as it has been lately, to muddle through. **Moreover, as the world confronts more frequent and severe profound shocks such as financial crises, terrorism, extreme weather and pandemics** (McKinsey Global Institute 2020), **the WTO needs to step up its role during systemic crises.** **The fact that the organisation has been faltering, that there is a leadership vacuum and that distrust runs high among major traders will not make it any easier.** Exacerbated tensions related to the pandemic can only add to the feeling that WTO rules have been conceived for a very different context, increasing the risk of a loss of legitimacy (Jean 2020). **This is not about a major reset of the WTO. It is about (re)activating the organisation to serve its members as they combat the devastating impact of the pandemic and the global recession**. The WTO needs broader reform, in particular to address structural changes in the global economy. While extremely important, this discussion should not hamper the ability of the WTO to deliver at times of systemic crisis. Moreover, should the WTO – or more accurately, its members – demonstrate they can actually rise to the occasion in the context of COVID-19, **they will also contribute to increasing trust levels** **on the ability of the organisation to produce results**. The starting point is a shift in mindset: governments need to understand that international trade is not a problem in the crisis, but rather a core element of the solution (Baldwin and Evenett 2020). Take the shortages of medical supplies. There are three methods of assuring supply: stockpiling, investments in manufacturing capacity and trade. Of these options, relying on international trade is the most efficient and economic choice, provided the WTO can help assure security of this method of supply (Wolff 2020a). To be sure, many nations have taken unilateral steps to facilitate trade, especially in medical supplies and medicines. The Global Trade Alert reports that while 91 jurisdictions have adopted a total of 202 export controls on these goods since the beginning of 2020, 106 jurisdictions have executed 229 import policy reforms on these goods over the same period.4 After initial border closures, some neighbouring countries are beginning to facilitate the cross-border flow of goods. At the regional level and among subsets of countries, governments have issued different statements to keep trade lanes open and supply chains moving (see Table A1 in the Annex). After a tepid declaration from G20 leaders, trade ministers reaffirmed their determination to cooperate and coordinate to mitigate the impact of the COVID-19 pandemic on trade and investment and to lay a solid foundation for a global economic recovery. They also endorsed a set of short-term collective actions on trade regulation, trade facilitation, transparency, operation of logistics networks and support for small enterprises, and a group of longer-term actions on WTO reform, GVC resilience and investment; monitoring of implementation was left to senior officials (G20 2020). These actions are positive and reflect the political will of governments to collaborate to some extent – even if they have not fully countered the flurry of barriers and restrictions surrounding trade in critical medical gear. They are no substitute for trade cooperation at the global level, either. In the case of medical products, for example, the EU, the US and China account for almost three-quarters of world exports (WTO 2020b); cooperation initiatives that do not include these members would fall short on impact. The venue for cooperation should be global and open to all, even if not all 164 WTO members opt to engage in all initiatives. TRADE MINISTERS SHOULD CALL THE SHOTS DURING CRISES Challenges notwithstanding, governments need to act now to empower the WTO to play an active part in coordinating the response to the pandemic. The WTO is more than an organisation immersed in myriad drama on the shores of Lake Geneva; it is a solid framework for global trade cooperation. **It is in countries’ interest to preserve the relevance of the WTO;** its role can be critical in helping members help themselves. In a member-driven organisation such as the WTO, the role of the Director-General and the Secretariat is important and can and should be enhanced, for example with greater power of initiative and strengthened monitoring and analytics capabilities. The WTO dedicated page on the pandemic is a step in the right direction.5 But the ultimate responsibility to provide direction and act rests with governments. The WTO is nothing more and nothing less than the collectivity of its members (Steger 2020), a point that is frequently forgotten in the public discourse. Without strong leadership, frequent engagement and serious interest among members in addressing its challenges, the WTO itself cannot deliver results (Cutler 2020). Paraphrasing VanGrasstek (2013), the multilateral trading system receives its inspiration from economists and is shaped primarily by lawyers, but it can only operate within the limits set by politicians.

#### Vaccine agreement is key – but negotiating business positions hinder it – the plan creates fair vaccine distribution and WTO unity.

**Baschuk 21**, Bryce. “WTO Chief Pursues a ‘Hectic’ Agenda to Fix World Trade’s Referee.” Bloomberg.com, Bloomberg, 27 Apr. 2021, www.bloomberg.com/news/articles/2021-04-27/wto-chief-pursues-a-hectic-agenda-to-fix-world-trade-s-referee.

The head of the World Trade Organization **raised an alarm about the credibility of the multilateral trading system**, urging leaders to act fast to bolster the global economy with steps like fairer vaccine distribution and cooperate to resolve longer-term problems like overfishing. During her first two months, WTO Director-General Ngozi Okonjo-Iweala has met with trade ministers around the globe to communicate a message that **the WTO is important, it needs to be reformed and it needs to deliver results.** So far, she says the reception from world leaders has been positive, but quickly translating that goodwill into substantive outcomes during a global pandemic is just as daunting as she anticipated. “The word I would use to describe it is absolutely hectic,” Okonjo-Iweala said in a phone interview on Tuesday when asked about her first few months in the job. “The challenges we thought were there are there and getting an agreement is not as easy because of longstanding ways of negotiating business positions.” Read More: Arcane WTO Pact Moves to Center of Vaccine Debate: Supply Lines Countries need to move past the notion that one country’s gain in international commerce is another’s loss, she said. “We need to break out of the zero-sum deadlock,” Okonjo-Iweala said. “We need to remind the countries and members that the WTO is here to deliver for people. **We can’t take 20 years to negotiate something**.” Okonjo-Iweala said **her top priority is to use trade to alleviate the pandemic** and said her recent meeting with trade ministers and vaccine manufacturers provided a positive step in the right direction. ‘More Pragmatism’ “That meeting yielded quite a lot,” she said. “I see more pragmatism on both sides.” An important component of the WTO’s trade and health agenda is a proposal from India and South Africa that seeks to temporarily waive enforcement of the WTO’s rules governing intellectual property for vaccines and other essential medical products. Read More: U.S. Trade Chief Meets Pfizer, AstraZeneca About Vaccine Supply As of this week there are fresh signals that the Biden administration, which currently opposes a waiver to the WTO agreement on Trade-Related Aspects of Intellectual Property Rights, wants vaccine manufacturers like Pfizer Inc. and AstraZeneca Plc to help ramp up U.S. pandemic assistance to the rest of the world. “There is movement,” Okonjo-Iweala said. “Are we there yet? No, but there is a little bit of change in the air among members. I think hopefully we will be able to come to some sort of a framework for the WTO ministers to bless.” “We don’t have time,” she added. “People are dying.” Okonjo-Iweala said this month’s vaccine meeting also revealed areas where the developing world can increase its capacity to produce more doses rather than waiting for rich countries to send them their excess supplies. She said various emerging markets such as India, Pakistan, Bangladesh, Senegal, Indonesia and Egypt already have some capacity to begin producing vaccines for people living in developing economies.

#### ADV. 3

#### By reducing IPP, women in developing countries will see an increased access to generic medicine, which occurred prior to the instatement of TRIPS.

**Mike 5**: Mike, Jennifer H. [School of Law, American University of Nigeria, Yola, Nigeria, Nigeria] “Access to essential medicines to guarantee women's rights to health: The pharmaceutical patents connection” *Wiley Online Library,* 2020. <https://onlinelibrary.wiley.com/doi/full/10.1111/jwip.12161> JP

3.1.1 **The TRIPS agreement**: Patent rights access to medicines The Agreement is considered a determining factor in the challenge of access to medicines because it introduced the same minimum standard of patent rules for all WTO members to adopt and implement (Fisher & Syed, 2010, p. 183; Pogge, Rimmer, & Rubenstein, 2010, pp. 5–6; 't Hoen, 2009, p. 5). Thus the Agreement has added impetus to the concern that the patent protection of processes and products can restrict generic competition and raise the transaction cost of accessing medicines which, in turn, limits the ability of users to purchase the product at a competitive price (Aginam & Harrington, 2013, p. 2; Pogge, 2010, p. 137; Scherer & Watal, 2002; p. 914). **The core concern is that patent rights in the TRIPS Agreement, to the extent that it has broadened and lengthened the scope of the protection thereby increasing the market power conferred by patents, is seen to contribute to the problem of accessibility (Sampath, 2004, p. 257). Before the establishment of TRIPS, some developing countries were able to avoid paying the high prices charged by pharmaceutical companies for purchasing branded medicines by acquiring the generic equivalents at a lower price from other countries whose patent laws did not cover pharmaceutical products, such as India ('t Hoen, 2009, pp. 5–6).** These generic medicines had the advantage of being less expensive when compared to patented equivalents because they did not have all the risks and costs associated with R&D for manufacturing new medicines (Fink, 1999, p. 2). **With the introduction of the TRIPS, however, generic reproduction or imitation of patented drugs amounts to infringement in all WTO member countries, unless produced under the safeguard and flexibilities in TRIPS or produced under licence from the patent holder (Sampath, 2004, p. 260).** These structural conditions and mandate imposed by global patent law have reconfigured the landscape of countries that were prominent generic drug producers. For example, generic producing industries in Brazil and India had to conform to the mandatory 20 year term for product patents which was previously not part of their patent law (The World Bank, 2010, p. 113).42 With this new development, many developing countries who hitherto relied on cheaper generics from these countries for several reasons, including the inadequate or insufficient manufacturing capacity and expertise, raised the concern that patents for pharmaceuticals will affect the supply, availability and accessibility of the less expensive generics (Dhar & Gopakumar, 2009, p. 130). **This is especially an issue where the patented versions are expensive and out of reach for poorer women.**

#### AND THIS IS NOT A FUTURITY CLAIM – MY PERFORMANCE RIGHT HERE, RIGHT NOW FIGHTS THE SQUO. Debate becomes an echo chamber of male oppression unless we interject feminist thought into it.

**CBTJ, bracketed for gendered language:** Cultural Bridges to Justice. [cbtj has grown into a consortium of competent, highly effective, passionate trainers and activists from across the United States who believe that challenging oppression, while forging justice, is both a practical necessity and a moral imperative of contemporary life] "When I Doubt Myself and other Females– challenging internalized sexism / internalized misogyny" *Cultural Bridges to Justice*, no date (most recent mentioned date is 2011). AZ

**Internalized sexism is defined as the involuntary belief by females and females that the lies,** stereotypes and **myths about females and females that are delivered to everyone in a sexist society ARE TRUE. females and females, boys and men hear the sexist messages (lies and stereotypes) about females over their entire lifetimes.** They hear that females are stupid, weak, passive, manipulative, with no capacity for intellectual pursuits or leadership. There are two logical, predictable consequences of a lifetime of such messages. First, boys / men will grow to believe many of the messages, and treat females accordingly. They will be thoroughly indoctrinated into their role in sexism, protecting their male privilege by colluding with the perpetuation of sexism. But there is a second logical consequence - **the same messages also stick to females and females, resulting in internalized sexism / internalized misogyny. females and females are taught to act out the lies and stereotypes, doubting themselves and other non-males (sometimes called “horizontal hostility.”) This is the way females collude with the perpetuation of sexism. For the sexist system to be maintained and passed on to the next generation, we all must** believe **the messages (lies and stereotypes) to some degree, and collude with sexism by performing our assigned roles.** Most progressive, non-profit organizations, whether in human services or social change, recognize that their mission cannot be completely fulfilled until all forms of oppression (racism, sexism, heterosexism, classism, ableism, anti-Semitism, et al) are addressed. Many of these same organizations, however, do not recognize the forms of internalized oppression that interfere with accomplishing their missions. **females’s organizations, in particular, must take conscious action to recognize, acknowledge and interrupt internalized sexism / internalized misogyny as it affects individual females and the organization as a whole.** This workshop encourages females to recognize and examine the harmful impact of a lifetime of sexist messages on their own self image, as well as their attitudes toward other females. Exercises and skills are offered to affirm females, females’s skills and to challenge internalized sexism, in our own lives, for females in our lives, and in our females’s organizations. Sample Objectives To provide a framework and common language for genuine dialogue about sexism and internalized sexism, and to create an environment which encourages such dialogue.

#### The time to act is now - Patent law reform would increase the supply of contraceptives and affordability of cancer treatments.

**Chaskalson:** Chaskalson, Julia. [Writer at Spotlight] “Opinion: WTO waiver is important, but so is fixing SA’s outdated patent laws” *Spotlight,* March 2021. JP

Fix the Patent Laws – a coalition of over 40 patient advocacy groups and health-based civil society organisations – has written twice to the Presidency and the Department of Trade and Industry and Competition (DTIC) since the start of the COVID-19 pandemic to highlight concerns with South Africa’s current IP system and the implications for COVID-19 vaccines and other medicines. The history of the battle for antiretrovirals to treat HIV has shown that patent regimes can either be crucial in realising the right to access healthcare and health products, or act as barriers to equitable, affordable access to medicines. As it stands, our patent system does not examine patent applications to determine whether they meet strong patentability criteria, and simply grant patents on application. This has resulted in many patents being unwarranted: some drugs under patent here are not patented anywhere else in the world. **Our patent system allows ‘patent evergreening’ – where the period of patent protection is extended and keeps the prices of medicines artificially high for extended periods of time, which has limited access to life-saving medicines**. Activists are adamant that government must reform our patent system. The coalition has urged the Presidency and DTIC to publish new legislation adhering to the recommendations of the Intellectual Property Policy Phase I which was adopted by Cabinet in 2018. This policy aligns with global public health policies and best practice, but the DTIC seems to drag its feet when with publishing new legislation. **It is critical that Bills be published for public comment and expedited into law not only to strengthen South Africa’s efforts to make sure that COVID-19 vaccines and treatments can reach all the people but importantly also to increase access to medicines generally at home.** The South African government has acknowledged, through its joint-proposal at the WTO, that special measures are needed to facilitate access to medicines, prevent deaths and relieve pressure on the health system. But COVID-19 is not the only health crisis to which these measures should apply. While the patent waiver at the WTO is a bold move from the South African government for our country and others in the Global South, the waiver would only exist for the duration of the pandemic, and only in relation to COVID-19 medicines. Real patent law reform domestically would save lives in South Africa now and for years to come. **Patent law reform could help to give cancer patients affordable and equitable access to medicines, people living with HIV greater access to second or third line antiretrovirals, increase the supply of contraceptives and push down the prices of drugs for drug-resistant tuberculosis. Not only is this possible, but it is a constitutional imperative. Over and above promoting the rights to equality, dignity and access to healthcare and medicines, new legislation would save lives, relieve pressure on healthcare workers and ease the strain on our public health system. And it cannot wait any longer.**

#### A fem foreign policy approach has broad implications – it’s key to solving structural disparities in policy.

**Sadinsky et al:** Sadinsky, Sophia. [Senior Policy Associate, Global Issues] “Here's Why Sexual and Reproductive Rights Must Be the Linchpin of Feminist Foreign Policy” *GuttMacher Institute,* 2021. JP

**As global leaders are taking decisive steps to begin rebuilding many of the systems devastated in the first year of the COVID-19 pandemic, they have an opportunity and a responsibility to optimize this moment of reconstruction and address structural, gender-based disparities.** **The combination of long-standing inequities and pandemic-exacerbated conditions has clarified that sexual and reproductive health and rights are foundational and necessary for gender equality, as well as to a full recovery from the damage caused by COVID-19**. What Is Feminist Foreign Policy? Traditionally, foreign policy has treated issues like gender equality as separate from and peripheral to core aims, such as promoting national security and trade. But a new and growing body of evidence illustrates how improving gender equality is in fact central to those aims, resulting in healthier and more prosperous societies. For example, equalizing women’s participation in the workforce with men could boost the global gross domestic product by $28 trillion annually and would benefit countries at all income levels. **There is also evidence that gender equality is associated with peace and stability; the larger the differences between men and women’s experiences and opportunities in a given country, the more likely that country is to be involved in violent conflic**t. The first official recognition of gender equality as a global priority was in 1995 at the United Nations Fourth World Conference on Women in Beijing, but it is only in the past decade that countries have begun to develop and adopt feminist foreign policies. **This approach has evolved from tackling gender equality as just one of the many disparate aims of foreign policy, and instead applies a gender lens to every foreign policy decision, from aid allocations to political representation. It also acknowledges how gender inequality overlaps with other forms of oppression, such as racism and classism, and takes an intersectional approach to feminism.**

#### Further, the aff ensures that medicine is declared a *human right* and is accessible to *all*.

**Mike 6**: Mike, Jennifer H. [School of Law, American University of Nigeria, Yola, Nigeria, Nigeria] “Access to essential medicines to guarantee women's rights to health: The pharmaceutical patents connection” *Wiley Online Library,* 2020. <https://onlinelibrary.wiley.com/doi/full/10.1111/jwip.12161> JP

**In this paper, access to medicines is identified as a fundamental human right to health, given that the right to health cannot be achieved without access to essential medicines for effective treatment of ailments and diseases.** Health as a human right is enumerated in several human rights instruments. Article 25 of the United Nations Declaration of Human Rights identifies that: “[e]veryone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services.” The 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in Article 12(1) makes provisions for the consideration and protection of women's right to health. In addition, health, and the importance of accessing essential medicines for adequate healthcare, are identified as significant to an adequate standard of living and connected to other human rights such as the rights to life, human dignity, education, development and the participation in civil and political life of society. **Significantly, universal access to “quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all” is one of the Sustainable Development Goals (Goal 3) (WHOa; Perehudoff, Alexandrov, & Hogerzeil, 2019).** In this respect, it is argued that human right is significant to the issue of access to medicines not only because it seeks to guarantee the moral and legal freedoms and entitlements of every individual, human rights also protect and promote the realisation of certain rights, such as the right to health, life and medicines—usually in relation to the responsibilities of states to uphold, guarantee and implement. **In this vein, the article argues that the exercise and implementation of patent rights can raise human rights issues in the context of human health, life and access to essential and affordable life-saving pharmaceuticals.** Thus, the design, interpretation and enforcement of patent rights should respond to the right to access medicines, as a component of the right to health and life. **Essentially, human rights principles, norms and frameworks provide additional moral and humane support for the consideration of women's access to medicines, in view of the adverse effect of international and national patent law and the nature of the right conferred to inventors.**

#### DROP-OUT NET BENEFIT: this keeps me here. Non-male debaters leave the activity after being continuously told to hold their tongues.

**Amer, bracketed for language:** Amer, Areeba. [Greenhill student] “Sexism is a problem in debate, female debaters say” *The Evergreen*, April 2016. AZ

Despite the success of Greenhill Debate, **female debaters often leave the program.** According to class rosters, there are currently only five females in the Advanced Debate class out of a total of 13 students. Of these five, there is only one active non-male senior debater. Many say this is due to the apparent sexist behavior in debate, not exclusively at Greenhill, but at tournaments as well. Before senior Brooke Bulmash’s first debate tournament her freshman year, Cindy Timmons, Director of Debate Aaron Timmons’ wife, who often helps at tournaments, sat her and the other females **females down to discuss the way they should handle themselves during a tournament. They were told to hold their tongue and mind the volume of their voice, because trying to match boys’ behavior would paint them in a bad light.** Whereas boys might be perceived as assertive, females are often perceived as ‘bossy,’ even if they are simply rising to the same level of aggression as their male opponents. Brooke said she soon realized why this conversation was important so early on in her debate career. Although the treatment of females in debate at Greenhill was fair and equal, the tournaments were a different story. “I was about to give the first constructive speech, and as I gave [my opponents] the flash-drive with my speech on it, and I was walking back to my computer I heard, ‘Debate Barbie,’ [from the opposing boys] which was very unsettling. That threw me off for the rest of the round and even the rest of the tournament,” Brooke said. According to Brooke, the incident made her realize the amount of criticism that females receive in debate. She said it’s not just the way females speak that is scrutinized, but also the way they dress. “There is a lot of scrutiny on the way you dress as a debater. females who wear high heels and a lot of makeup and not necessarily business attire are seen as less competitive,” Brooke said. Middle and Upper School Debate Coach Eric Forslund said that sexism isn’t exclusive to debate, but is an issue throughout competitive academic fields. “I think there are some pressures females face nationally. When they are involved in high-level academic events, there is pressure to not be associated with that. I’ve seen that quite a bit, there is more pressure to do things that are considered feminine,” Mr. Forslund said. Senior debater Grace Kuang said that there is pressure on the females to not make mistakes in class, as they risk losing credibility when they do. “It’s weird because a lot of the people there, especially guys, aren’t intentionally trying to be sexist. It’s like when you get a group of guys together who are really intelligent and who think they are really intelligent, there’s this group mentality that always happens where it feels like you’re consistently undermined, or if you speak up in class and give the wrong answer, there’s more loss of credibility when you do it than when they do it,” Grace said. Senior Shivani Daftary, who is still enrolled in the class but no longer debates competitively, said that this creates an exclusive atmosphere where females do not always feel comfortable. “I think **females may be deterred from the activity because they might not want to be in a class that’s full of just guys. It’s kind of intimidating. The way that guys go about learning is different than females, and when you don’t have any other females on the team or only have one other girl, it can seem a little alienating. In a sense, it seems like, ‘Why am I doing this activity if I’m not treated in the same way, even if it may be unintentional or subconscious?’” Shivani said. Shivani said part of the reason she left competitive debate was because of the lack of female role models in the activity.** “Partially it had to do with the fact that I had other commitments and I didn’t want to give up everything for debate, so I switched to public forum because it was less time intensive. But another portion of it was also the way that male coaches, not intentionally, but especially in the debate world, teach in general is very different than how a non-male might coach. They expect that you know something, and if you don’t, it’s guy mentality that they joke around about it,” Shivani said. Freshman Sophia Hurst, who is in the Introductory to Debate class, said that boys in her class form a camaraderie that excludes females. “The team dynamic is very masculine and very based on a male dynamic. It may not be sexist, but there is definitely exclusion throughout the debate community,” Sophia said. According to Director of Debate Aaron Timmons, Greenhill’s debate staff recognizes these issues and has had conversations about possible solutions. “Start with young females and allow them to have a voice. One of the things we have done in the last four to five years is develop a Lower School speech and debate club, and when they’re younger, we have the females debating mainly with females and the boys debating with boys. It’s to develop a sense of confidence and a sense of a voice that they may not have had,” Mr. Timmons said. Freshmen debater Esha Julka noted that it is up to the females in debate to serve as role models to other females who may be hesitating to join the team. “As females, it’s our responsibility to do so because the only way we are going to get females to stick with an activity that they love is to make sure they have someone there guiding the way,” Esha said. Mr. Timmons believes it’s also important to have non-male coaches. Shivani agrees, and believes that having non-male role models on the team would result in a higher retention rate for females. “There’s a difference between having two males coaches on the debate team and having non-male representation. **Starting off freshman and sophomore year the class is pretty equal in terms of females and boys, but in terms of people you look up to, they’re all guys,” Shivani said.** Currently, Greenhill Debate has two assistant non-male coaches. However, they do not spend much time with the team. Sophia and Esha think they should play a bigger role on the team. “They’re not really very involved, so it’s hard to tell what they’re like. They come to tournaments when the coaches can’t, and it’s hard to form a relationship with someone you don’t see very often,” Sophia said. Despite the issues that many females face in debate, there are females who thrive in the program and debate all four years of high school. “We’ve had over the last few years a robust number of females participate. Not only participate, but excel. They’re the ones who can not only put into words, but also have the motivation, the drive to navigate through some tough situations. Some of the best debaters we have had here have been females,” Mr. Timmons said. Last week, junior Shruthi Krishnan was named the top speaker and champion of the National Debate Coaches Associations National Championship event. She was thrilled to gain this status not only for herself, but for her team, saying that her role models were the strong Greenhill non-male debaters that came before her. “I was really excited to win top speaker and win the event because it’s a goal I’ve had ever since I joined Greenhill debate as a freshman. I would look up to all the people that had done Lincoln-Douglass debate before me like Rebecca Kuang a couple years ago and think, ‘That’s so cool, they won all these awards, I want to be successful like them,’” said Shruthi. “Some of my biggest role models and some of our most successful debaters have been non-male debaters, like Rebecca Kuang and Mitali Mathur.” Despite the program’s flaws, Grace said that it’s important for females to continue debate because of the value of the skills learned in the activity. “It is such **a shame when a girl female quits debate because of a guy because it’s such a valuable activity,” said Grace. “It teaches females how to combat sexism in the real world and gives them those advocacy skills that will help them later on in life.”**