# 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 should reduce intellectual property protections for COVID-19 medicines.**

### Adv - COVID

#### 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.

#### Wealthy nations are blocking a WTO patent-waiver proposal necessary to boost global production of COVID vaccines.

**Meredith 21**, Sam. “Rich Countries Are Refusing to Waive the Rights ON Covid Vaccines as Global Cases Hit Record Levels.” CNBC, CNBC, 22 Apr. 2021, www.cnbc.com/2021/04/22/covid-rich-countries-are-refusing-to-waive-ip-rights-on-vaccines.html.

LONDON — The U.S., Canada and U.K. are among some of the high-income countries actively **blocking a patent-waiver proposal** designed to **boost the global production of Covid-19 vaccines.** It comes as coronavirus cases worldwide surge to their highest level so far and the World Health Organization has repeatedly admonished a “**shocking imbalance” in the distribution of vaccines amid the pandemic.** Members of the World Trade Organization will meet virtually in Geneva, Switzerland on Thursday to hold informal talks on whether to temporarily waive intellectual property and patent rights on Covid vaccines and treatments. The landmark proposal, which was jointly submitted by India and South Africa in October, has been backed by more than 100 mostly developing countries. It aims to facilitate the manufacture of treatments locally and boost the global vaccination campaign. Six months on, the proposal continues to be **stonewalled by a small number of governments** — including the U.S., EU, U.K., Switzerland, Japan, Norway, Canada, Australia and Brazil. “In this Covid-19 pandemic, we are once again **faced with issues of scarcity**, which can be addressed through diversification of manufacturing and supply capacity and ensuring the **temporary waiver of relevant intellectual property**,” Dr. Maria Guevara, international medical secretary at Medecins Sans Frontieres, said in a statement on Wednesday. “It is about saving lives at the end, not protecting systems.” The **urgency and importance of waiving certain intellectual property rights amid the pandemic have been underscored** by the WHO, health experts, civil society groups, trade unions, former world leaders, international medical charities, Nobel laureates and human rights organizations. Why does it matter? The waiver, if adopted at the General Council, the WTO’s highest-level decision-making body, could **help countries around the world overcome legal barriers** preventing them from producing their own Covid vaccines and treatments. Advocates of the proposal have conceded the waiver is not a “silver bullet,” but argue that **removing barriers** toward the development, production and approval of vaccines is **vital in the fight to prevent, treat and contain the coronavirus.**

#### 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.

#### 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.

**The 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.

### Adv – Cap

#### Capitalism’s desire to  accumulate via Intellectual Property Rights is an inherent structural contradiction – all IPR does is re-entrench existing capitalist structures

**Karakilic 19** [Emrah holds a master degree in human, society and philosophy (distinction) and a PhD in sociology from Goldsmiths, University of London, 2019,Technological Forecasting & Social Change” Rethinking intellectual property rights in the cognitive and digital age of capitalism: An autonomist Marxist reading”https://www.sciencedirect.com/science/article/abs/pii/S0040162518316275] //aaditg

In industrial capitalism, the juridical and institutional arrangements that regulate the content and implementation of property rights in general and intellectual property rights in particular were not always at the forefront as a subject of debate. Especially in the latter case, the overall volume of “intellectual” products such as knowledge(s), designs, ideas, codes, images was quite limited (largely R&D specific), and their trade under monopolistic conditions was structured and secured by the mechanisms of patents, trademarks/branding, and copyright. The central function of these mechanisms was to facilitate the transformation of these immaterial products into forms of scarce commodities on the market. In this way, **the owners of intellectual property rights could possess a sort of monopoly** before the law and thus enjoy the profits it brought. Enclosure, in other words, was largely an unproblematic presupposition of capitalist relations. With the transformation of industrial capitalism into cognitive capitalism (Boutang, 2011; Corsani et al., 2001; Dieuaide et al., 2003; Fumagalli, 2011; Lucarelli and Vercellone, 2013; Negri, 2008; Paulré, 2000; Vercellone, 2007), nevertheless, something has happened and, as a consequence, the subject of intellectual property rights has come to the forefront as a distinctive issue on both public and academic platforms. This something, we will argue, consists in the tendency of the organisation of (immaterial) production within and through the common and the rise of the digital revolution. In cognitive capitalism, specifically, the value and wealth have come to rest on immaterial production which is increasingly conducted within and through the common. This development is accompanied by the massive diffusion of the results of immaterial production (**e.g. knowledge, idea, code, images)** largely free by means of new information and communication technologies. The mass and free circulation of what is economically valuable has created a “threat” to well-established relations of capitalism. One of the apparatuses to intercept the free circulation of immaterial products or better, the emerging union between workers and means of production has been directed towards the enclosure of common through the aggressive enforcement of intellectual property rights. This development stimulates me to re-address a fundamental question: is the extension and implementation of intellectual property rights a precondition for economic health? For those who draw on orthodox economic theory, the answer tends towards “yes” - even though ambivalence marks the literature. **In this very journal and beyond, for example, the enclosure via intellectual property rights has largely been viewed as an apparatus that must be strengthened to increase companies' ‘financial performance’** (Bollen et al., 2005; Suh and Oh, 2015; Willoughby, 2013), to sustain ‘innovation’ (Horlbulyk, 1993; Hu and Hung, 2014; Pérez et al., 2018; Sweet et al., 2015), and to facilitate economic growth (Gould and Gruben, 1996; Park and Ginarte, 2007). In turn, Archibugi and Filippetti (2018), Baker et al. (2017), Boldrin and Levine (2002, 2010), Lerner (2009), Stiglitz (2014), developed alternative arguments, challenging these general assumptions to a certain extent. In this paper, I will **contribute to the second position by problematizing the “intellectual property rights are a socio-economic need” thesis by engaging in a critical update on the concept through autonomist Marxist theory.** In the second and third sections, I will focus on the current state of socio-economic affairs and offer a ‘political reading’ (Cleaver, 2000) of intellectual property rights. I will bring forward that the aggressive enforcement of intellectual property rights pertains to, first and foremost, the re-separation of wage-workers from the ownership of the new means of production. In the fourth section, I will **discuss the structural contradiction manifested by the capital's desire to enclose via intellectual property rights.** In particular, I will argue that the current regime of intellectual property rights i) prepares a basis for a social crisis in terms of **established relations of production and, at the same time, ii) curtails a part of socio-economic opportunities for innovation, profit-making, and growth**. A brief conclusion will ensue. 2. Cognitive capitalism and the becoming of production common **Capitalism is an unstable, destructive, and crisis-prone mode of production.** Thrift notes that ‘**we live in a world that exists on the economic edge**, close to an abyss but never quite falling into it … It [**capitalism] is like a battery that continues to accumulate energy without pause’** (2011: vi). **Capitalism survives;** and it survives precisely **by transforming itself into a new modality**. Tronti (1979) formalised one of the most important methodological lessons for the study of the transformation of capitalism, which is acknowledged within autonomist Marxist theory as a sort of ‘Copernican revolution’ (Toscano, 2009: 114). He puts that ‘we too have worked with a concept that puts capitalist development first, and workers second. This is a mistake… At the level of socially developed capital, capitalist development becomes subordinated to working class struggle; it follows behind them, and they set the pace to which the political mechanisms of capital's own reproduction must be turned’ (Tronti, 1979: 1).2 **That is, working class is always anterior in the ‘reactive history’ (**Hardt and Negri, 2000: 268) of capitalism; it sets the terms and nature of transformation. Embracing this lesson, MATISSE scholars and other autonomist Marxist theorists have periodised capitalism by placing emphasis on one of the central dimensions concerning the reactive history of capital-labour relation, namely the control of ‘the intellectual powers of production’ (Marx, 1990).3 Capitalism is older than industrial capitalism. The first period in the trajectory of capitalism in the Braudelian longue durée was discerned as mercantilist capitalism, developing between the beginning of the sixteenth century and the end of the eighteenth century. The model of production in this period was based on the system of putting-out model or concentrated manufacture with its main capitalist persona, mercantile entrepreneur. While the latter was enjoying the fruits of production by appropriating surplus-labour, the production itself was largely organised and executed by independent artisans, craftsmen, artists working in cooperation and collaboration. In this period, Vercellone notes, ‘capital subsumes a labour process … which pre-exists it and in which the co-operation of workers does not require mechanisms of capitalist direction of production’ (2007: 20). From technical point of view, in other words, the **production process was autonomous in relation to capital.** In this regard, the central “concern” from the perspective of capital was that even though workers depended strictly on the figure of mercantile entrepreneur in monetary terms, they were in fact powerful actors in political terms, for they were controlling the intellectual powers of production. Accordingly, the workers could always resist mercantile entrepreneur and claim control over the organisation, methods and intensity of the production process. Therefore, in this period, Marx states, ‘capital is constantly compelled to wrestle with the insubordination of the workmen’ (1990: 489). It was not a historical coincidence that mercantilist capitalism dissolved and industrial capitalism began with the arrival of cutting-edge (for that period) technological innovation and progress. The industrial technological revolution conditioned the rise of industrial capitalism, the second period in the longue durée. **The industrial capitalism eventually found its historical fulfilment in the Fordist system of accumulation, whose driving force was Manchester-style big factories with heavy machinery and assembly lines.** The specialisation was primarily in the mass-production of durable and standardised goods. The organisation of labour was typically administered through scientific methods (e.g. Taylorist production methods), involving the establishment of prescribed simple-tasks, performed in pre-determined timeslots and measured by a chronometer. What capital achieved with scientific methods and machinery is diverse. What interests us here, nonetheless, is the results of the integration of labour into intricate processes of machinery from the perspective of working class. In industrial capitalism, Marx argues, ‘the production process ceases to be a labour process in the sense of a process dominated by labour as its governing unity. Labour appears, rather, merely as conscious organ … subsumed under the total process of the machinery itself’ (1993: 693). Technology and machinery terminated the hegemony of workers' “living” knowledge over “dead” knowledge of capital by separating the workers from cognitive elements of work. They facilitated capital to decompose the autonomous worker and establish control over the intellectual powers of production. The worker became an ‘ox than any other type’ (Taylor, 1911: 59). How can we think of the dynamics of transition from industrial capitalism to cognitive capitalism? The main argument of autonomist Marxist theory is that it was precisely the accumulated social struggles of workers in the 1960s and 70s against the deepening of Fordist mode of working and living that brought about the structural crisis of industrial capitalism (Castellano et al., 1996). The mass insurgency, first, led to the ‘development of the institutions of the welfare state, [above all] mass education was established’ (Vercellone, 2007: 25). It, second, led to the extension of wage and hence created a new margin for converting a part of surplus-labour into free time. **The free time spent on education, research, art, communication, public interaction and all other activities of human development ‘permitted wage-labourers to accumulate a technological, theoretical, and practical knowledge adequate to the level attained by the capitalist development of the social and technical division of labour’** (Vercellone, 2007: 27). This state of affairs was termed ‘mass intellectuality’ by Virno (1996) and ‘diffuse intellectuality’ by Vercellone (2013) which denotes, the intellect that is diffused across the whole society. The workers of mass intellectuality consequently began to demand more creative, flexible, communicative, innovative, or in a word, more fulfilling forms of labour which will correspond to their cognitive capacities. Once again, workers invented and ‘dictated the terms and nature of [capitalism's] transformation’ (Hardt and Negri, 2000: 268). Indeed, capital had to address the demands of workers because capital produces nothing without labour, which is the sole element of value creation (Marx, 1990). **Capital responded to the demands by mutating itself into a new form, a new ‘system of capital accumulation’** (Dieuaide et al., 2003), which was based on the mobilisation and absorption of the creative, innovative, affective, relational, and communicational capacities of workers. In contemporary capitalism, the principle source of value and wealth does not lie much in manual labour (e.g. physicalenergy, dedicated to the accomplishment of prescribed tasks) but increasingly in the ensemble of mental and affective capacities of workers which are set in motion in production processes. This new system of accumulation entered into the autonomist Marxist literature as cognitive capitalism.4 At this point, we need to elucidate that what is cognitive in cognitive capitalism is not capitalism but the labour upon which the extraction of surplus-value rests. One of the most prominent figures of autonomist Marxism, Vercellone, defines the concept as follows: ‘Capitalism’ refers to the persistence, within the process of change, of certain fundamental invariants of the capitalist system, such as the driving role of profit and the centrality of the wage-relation, or more precisely of the various forms of dependent labour upon which the extraction of surplus-value rests. ‘Cognitive’ draws attention to the new character of the labour, value-sources and property forms on which the accumulation of capital is now based, as well as to the contradictions thereby engendered. (2013: 418) The rise of cognitive capitalism, a new system of accumulation which succeeds mercantilist and industrial capitalisms, is reflected in the tendency that immaterial products (e.g. knowledge, codes, ideas, information, symbols, images, logos, designs) or immaterial dimensions of products (i.e. their symbolic, aesthetic, and social value) have come to preponderate over material products or the material dimensions of products in the process of capitalist valorisation (Hardt and Negri, 2009; Lazzarato, 1996). This does not to convey that the production of material commodities (e.g. computers, cars, furniture) is in the process of gradual disappearance. Instead, the **argument is that the value of material commodities too increasingly rests on intangible factors.** In their report to the The French Ministry of Treasury, Lévy and Jouyet put that ‘in recent years, a new constituent has emerged as a key driver in the economic growth: immaterial… Today, **the real wealth is not concrete, it is abstract. It is not material, it is immaterial’** (2006: 1, my translation). For Morini and Fumagalli, the creation of wealth and value is increasingly based on immaterial production hence subordinated to the use of ‘intangible raw materials’ (2010: 235). For Boutang, the capture of gains from immaterial elements, constitutes ‘the central issue for accumulation, and it plays a determining role in generating profits’ (2011: 57). Vercellone, along the same line, argues that ‘the component of capital intangible, which is essentially embodied in human beings, now makes up a larger part of the overall capital-stock than material capital, becoming the crucial growth factor’ (2013: 434). One of the key characteristics of immaterial labour is that it intrinsically exceeds the bounds set in relation to capital. Excedence seems to me an underdeveloped notion -even in the literature mentioned above. By excedence, one might envision two ideas. First, with the great mutation from industrial capitalism to cognitive capitalism, ‘we pass from the static management of resources to the dynamic management of knowledges’ (Vercellone, 2007: 33). That is to say, ‘the knowledge mobilised by living labour is now hegemonic with regard to the knowledge embodied in fixed capital’ (Vercellone, 2013: 433). Boutang underlines that ‘the essential point is no longer the expenditure of human labour-power, but that of invention-power: the living know-how that cannot be reduced to machines’ (2011: 32). Therefore, on the one side, we affirm that today's economic production is directed towards absorbing the creative, innovative, affective, relational, and communicational capacities of living labour. On the other side, in immaterial production, labour is not crystallised in a material commodity that can be divorced from its producer. A car, for example, which is produced with material labour is immediately divorced from its producer. However, a research article, a code, an analysis, and alike cannot be divorced from the producer inasmuch as these products intrinsically reside within the mind and body of those who produced them in the first place. Therefore, immaterial labour increasingly exceeds; it potentially overflows the subsumption mechanisms set by today's economic production. Secondly, in industrial capitalism, which found its fulfilment in Taylorist production processes, workers' innovative, creative, technical capacities were rigorously confined to a particular site, that is, the site of material production. Consider, for instance, an assembly line worker producing in a cable factory. The whole ensemble of technological and mechanical knowledge s/he has accumulated through her/his lifetime was rarely put into work, and more significantly, those put into work were almost exclusively site specific. However, the production of immaterial products or immaterial elements of material products immediately mobilises producers to actualise and ameliorate their intellectual, communicational, affective, and social capacities. Furthermore, the **results of immaterial labour, not confined by the corporate walls, exceed work and spill over different spheres of life (as economists call externalities), and they begin to produce the common forms of wealth.** This is the point from where one might begin to envision the linkage between the excedence of immaterial labour and the accumulation of immaterial products in the common. De Angelis (2004), Hardt and Negri (2004, 2009), Negri (2008), Fuchs (2010), Hardt (2011), and Vercellone (2017) have theorised immaterial production with its connection to the concept of common. What is meant by the common? **Typically, the common denotes the wealth of nature (e.g. earth, water, air, elements, animal life) to be shared by all humanity.** In other words, the common refers to the natural world, harbouring the natural resources, outside of society. By a fair extension, the common also denotes ‘those results of social production that are necessary for social interaction and further production’ (Hardt and Negri, 2009: viii, emphasis added). The concept of common thus permeates equally all spheres of life, blurring the division between nature and culture, referring not only to the fruits of nature shared by human beings but also, and above all, to the artificial common(s): the creative, social, knowledge common(s); for example, the languages we construct, the knowledge we create, the social practices we enact. According to this second formulation, the common makes an appearance both at the beginning (as a presupposition) and at the end (as 4 The various pillars of the theory of cognitive capitalism in general and the concept of immaterial labour in particular have been challenged by many critical scholars, including Callinicos (2001), Dyer-Witheford (2001), Thompson (2005), Camfield (2007), Gill and Pratt (2008), Lanoix (2012). In this paper, it is not possible to delve into these criticisms and the ensuing discussions. However, it is important to note that the point of reference of all these challenges lies largely in Hardt and Negri's trilogy (Empire, Multitude, Commonwealth), which were written by the simplification of theory and in a provocative tone to mobilise human bodies towards partisan action. The publications of Invisible Committee via MIT-Semiotext(e) keep this form of expression alive. One who is interested in how these challenges are addressed at a more robust theoretical level might want to look at Negri (1992), Vercellone (2007), Casarino and Negri (2008), Negri (2008), Fumagalli and Mezzadra (2010), Hardt and Negri (2009), Lucarelli and Vercellone (2013), Vercellone (2013). In addition, a sound analysis of these discussions can be found in the special issue of Ephemera on Immaterial and Affective Labour, Dowling et al. (2007). E. Karakilic Technological Forecasting & Social Change 147 (2019) 1–9 3 an outcome) of immaterial production. To put it more precisely, the common consists of both the results as well as the means of immaterial production. In terms of being the presupposition, it might appear convincingly in mind that immaterial labour performs, and it can actually perform only on the terrain of common. Indeed, no one produces all alone but only within and through the spectres of the others' past and present existence. Consider, for example, the production of immaterial products such as ideas, knowledge, solutions, images, codes, language, and so forth. These products cannot really be produced by such a persona of “genius” in an ivory tower, that is, by a human being who is entirely isolated from the accumulated common intellect. Marx elegantly notes that knowledge and such products are ‘universal labour’, that is, ‘brought about partly by the cooperation of men now living, but partly also by building on earlier work’ (1992: 199). As Hardt and Negri maintain, ‘our common knowledge is the foundation of all new production of knowledge; linguistic community is the basis of all linguistic innovation; … and our common social image bank makes possible the creation of new images’ (2004: 148). The workers then must have an open-direct access to the common intellect in order to produce. This open-direct access to the common is essential for one's creativity, productivity, and more importantly for the realization of one's potentiality. The outcome of immaterial production, on the other side, exceeds and accrues to the common that then becomes a condition for the expanded production. The **results of immaterial production are not identical to material products, for they immediately tend towards being common through their circulation in social, cultural, and digital networks.** Gorz argues that when knowledge is produced and diffused, ‘it no longer has proprietors’ (1997: 18, my translation). From the perspective of economics, Boutang (2013) argues that today scarcity is no longer fatal. What we witness is that the ‘digital world restores abundance that had been destroyed partly or fully by industrial organisation of scarcity of commons’ (Boutang, 2013: 86). In other words, since the outcome of immaterial production can be coded in the digital media, reproduced, and delivered virtually at zero marginal cost, we may speak of the inversion of scarcity of commons in terms of immaterial products. Considering the technical developments, in particular the peer-to-peer protocols, Boutang underscores how the digital revolution has challenged (with respect to immaterial products) the statue of ‘a) reproduction; b) monopoly of circulation; c) authority that tackles with monopoly in interpretation; d) and finally authorship’ (2013: 86). The latter aspect of the commonality as well as how capital counter-acts will be discussed in the final part of this chapter. So, what we have here is a sort of virtuous cycle which is typical of immaterial production process. Immaterial labour force, through working on the accumulated common forms of wealth, creates new commons which, in turn, becomes the base (i.e. raw materials) for expanded production. Fuchs (2010) upholds that all humans benefit from the commons: the present generation works on the commons produced in the past and then hands over enriched commons to the future generation. From what we have noted until now, we can discern another aspect of immaterial production. Let me to consider, for instance, the production of scientific knowledge. The potential outcome in our case might be a journal paper, monograph, conference speech, series of lectures, accruing to the general intellect and, at the same time, contributing to the ground basis for the production of further scientific knowledge. We have already pointed this out. In addition, the production of scientific knowledge necessitates, by its nature, engagement in communication, cooperation, collaboration, affective relation etc. between researchers, students, supervisors, editors, reviewers, and fellow academicians. Marx writes that ‘communal labour … simply involves the direct cooperation of individuals’ (1992: 199). No scientific knowledge, no idea, no computer code, no natural language, no artificial language, no authorship etc. can be produced without this sort of engagement. From this point of view, the common appears at the centre as well. That is to say, the immaterial production is increasingly conducted in the common. In this respect, Negri puts that: We assume not only that value is constructed within social production (which is obvious), but also that social production today presents itself in a manner which increasingly has the quality of the common, in other words as a multiplicity of increasingly cooperative activities within the process of production. (2008: 183) To sum up, the general outlines of the technical composition of immaterial labour indicate the growing autonomy of the labour process. First, the workers of diffuse intellectuality tend to get direct access to the common where the raw materials of production are located. They work on it in cooperation and collaboration and produce a new product that tends towards to common, which facilitate tomorrow's production. In addition, Hardt and Negri recognise that ‘labour itself tends to produce the means of interaction, communication, and cooperation for production directly’ (2004: 147). Producers, in this context, are virtually in no need of a figure from “outside” (e.g. leaders, capital owners, board of directors, shareholders, state representatives) that would administer the design, surveillance, and control of labour process. Production tendentially reveals itself as a sort of shared; a common process. The essential aspects of economic production no longer have to be made available by an “outsider” because these aspects increasingly flourish internally within the networks of production (i.e. by-product). The increasing power and growing autonomy of workers, based on the control of intellectual powers of production, had created a threat to existing capitalist production relations which was, in turn, counteracted by various political mechanisms enforced by the forces of “outside”. 5 One of the key mechanisms has been oriented towards enclosing the common. 3. Enclosure of the common: revisiting ‘so-called primitive accumulation’ One of the most enlightening ways to approach the enclosure of the common will be revisiting Part Eight of Capital volume I, So-Called Primitive Accumulation (1990: 873–940), where Marx often uses the terms of primitive accumulation and enclosure interchangeably. This is rather a controversial part in Capital which has predominantly been read through three different lenses within the Marxist literature. After discussing the first conventional interpretation briefly, I will focus on Bonefeld's (2001, 2002) reading which separates itself from the former fundamentally. I will then articulate my position through De Angelis (1999, 2001, 2004), contributing to Bonefeld by reading Marx “politically” (see Cleaver, 2000). The historicist interpretation of primitive accumulation is evident within the works of Lenin (1899), Dobb (1963), and Sweezy (1986). Here, the primitive accumulation is conceptualised as a temporally crystallised process whereby the preconditions of capitalist mode of production (i.e. (i) a section of population divorced from all means of production but their labour power, and (ii) an initial accumulation to be used for emerging industries) have emerged. Here, the primitive accumulation conveys, above all, ‘causality, where an historical event is understood to have caused the formation of a distinct mode of social relations which renders the causing event obsolete’ (Bonefeld, 2002: 3). Accordingly, the accent is on the transiency of the phenomenon; that is to say, once the process (a history of blood and fire, as Marx says) had been completed, we were no longer in the realm of primitive accumulation. Embracing this perspective, one inquiries into either the transition from feudalism to capitalism by rendering it a question of 5 One of the important figures of autonomist Marxist thinking, Lazzarato (2014, 2015), does not agree with this postulate. He finds it too optimistic and argues, through Deleuze and Guattari, that capital achieved to produce “selfnegating” and “automatically responsive” worker-subjectivity in tune with the priorities of capital (also see his arguments in Karakilic, 2017). genealogy or the complex issues of the capital-relation by rendering it a question of economics. Ultimately, both orientations assume a linear model of development, where the primitive accumulation indicates only a one-off epoch that is distinctly separated from capitalismproper.6 Bonefeld (2001, 2002) and De Angelis's (1999, 2001, 2004) political and theoretical formulation re-evaluates Marx's primitive accumulation, that is enclosure. Against the conventional one-off-in-history thesis, the theorists bring forward an alternative analysis that ‘primitive accumulation is necessarily present in mature capitalist systems and, given the conflicting nature of capitalist relations, assumes a continuous character’ (De Angelis, 2001: 2, emphasis added). Even though this key argument (i.e. primitive accumulation is a continuous process in capitalist mode of production) is shared by both theorists, they go separate at a certain juncture. Bonefeld argues that ‘primitive accumulation is Aufhebung in accumulation proper’ (2002: 4). The Hegelian term Aufhebung ‘connotes the dialectic process in which the negation of a form transforms the negated into a new form, in which it loses its independent existence and at the same time maintains its essence, constituting the substance of the new form’ (2002: 4). Translating into our context, the historic form of primitive accumulation is argued to be ‘raised to a new level where its original form and independent existence is eliminated (or cancelled) at the same time as its substance or essence (Wesenhaftigkeit) is maintained’ (2002: 4 and 6). Bonefeld's perspective thus brings forward two ideas: first, primitive accumulation principally specifies a historical epoch preceding capitalist mode of production; however (this however is everything), second, the essence of primitive accumulation maintains its existence as the indivisible principle of capitalism-proper. But what is the essence of primitive accumulation that Bonefeld speaks of as a living substance? **Marx formulates capital against the definitions given by the vulgar economists. It is not a thing referring to a stock of commodities but, first and foremost, a social relation.** For Marx, the capital-relation embodies a precise ‘presupposition’, namely ‘a complete separation between the workers and the ownership of the conditions for the realization of the labour’ (Marx, 1990: 874). In other words, ‘which creates the capital-relation can be nothing other than the process which divorces the worker from the ownership of the conditions of his own labour’ (Marx, 1990: 874). And, he precisely identifies the process here as primitive accumulation. Primitive accumulation is therefore viewed ‘nothing other than the historical process of divorcing the producer from the means of production’ (Marx, 1990: 875). The essence (wesenhaftigkeit) of primitive accumulation is thus understood through the term of separation: workers' separation from the means of production. One may then bring forward (by considering the last quote) that Marx's examination of primitive accumulation defines a question of genealogy (‘historical process’, Marx says). There is no doubt that one can capture akin statements that associate primitive with pre-history or others in which primitive accumulation is identified as the historical presupposition of the capitalism-proper. For example, Marx indeed states that ‘primitive accumulation … is the historical basis … of specifically capitalist production’ (1990: 775). He further states ‘a division between [the separation of] … subjective labour-power from the objective conditions of labour was therefore the real foundation in fact, and the starting-point of capitalist production’ (Marx, 1990: 716). Does it then mean that the primitive accumulation was one-off separation process in history? Bonefeld (2001, 2002) provides a closer reading of Marx to answer this question. He refers to the Grundrisse (see. 1993: 459–461) where Marx articulates the distinction between conditions of capital's ‘becoming’ or arising, and the conditions of capital's ‘existence’ or being. He argues that the conditions of capital's becoming ‘disappear as real capital arises’, and the conditions of capital's existence do not appear as ‘conditions of its arising, but results of its presence’ (Marx, 1993: 459). Marx thusly puts that ‘once developed historically, capital itself creates the conditions of its existence (not as conditions for its arising, but as results of its being)’ (1993: 459). According to Marx, in simpler terms, ‘whatever happened for the first time at the origin of the history of capitalism must logically repeat itself’ (Mezzadra, 2011: 305). Indeed, the continuity of the essence of primitive accumulation is everywhere in Marx's works. In The Process of Accumulation of Capital, Marx argues that ‘what at first was merely a starting-point [the separation] is constantly renewed and perpetuated by simple reproduction’ in capitalist production (1990: 716). In the Theories of Surplus Value, he argues that ‘accumulation of capital … on the basis of the relationship of capital and wage-labour, reproduces the separation … on an ever-increasing scale’; therefore, ‘accumulation merely presents as a continuous process what in primitive accumulation appears as a distinct historical process’ (1971: 315 and 271). In volume III of Capital, he puts that capital proper is ‘simply’ the separation which is ‘raised to a higher power’ (1992: 354). Bonefeld (2001, 2002) accordingly argues that primitive accumulation is a process occurring in present-day capitalism precisely because the accumulation proper indicates a posterior stage that reproduces the very essence of it, that is separation, on a greater scale. At this point, De Angelis (1999, 2001, 2004) makes a crucial contribution which informs my position. He does not merely argue that the essence of primitive accumulation (re)presents itself in accumulation proper as a by-product of economic reproduction. He, rather, underlines that it is precisely the processes of ex-novo separation (which characterises the primitive accumulation) that maintain their existence in accumulation proper. He argues that the separation ‘must not be seen as the necessary result of its [capital's] dynamic’, rather ‘as necessary aspiration embedded in its drives and motivation as well as its survival instinct vis-à-vis emerging alternatives to capital’ (2004: 69). He elegantly discerns what primitive accumulation in Marx refers to: ‘the problematic of the preservation and expansion of the capitalist mode of production any time the producers [and the spaces of life] set themselves up as an obstacle to the reproduction of their separation from the means of production’ (De Angelis, 2004: 69). Accordingly, primitive accumulation is conceived as ‘those social processes or sets of strategies aimed at dismantling those institutions that protect society from the market’ (2004: 13). In my view, one can only understand through this reading of Marx that, even if primitive accumulation were a problem of genealogy, the genealogy would manifest itself until a radical historical reversal would take place. Marx's account of capital, a process of circulation of values which are congealed in different things at various points, refers to the ad infinitum movement in which money is recapitalized in search of more money (Harvey, 2010). ‘What capital does is that it attempts to create life-worlds in its own image or to colonise existing ones, to put them to work for its priorities and drives … since the beginning of its history … until it has colonised all of life’ (De Angelis, 2004: 67). However, there arise some limits any one of which has to be transcended by capital. Marx (1993), in the Grundrisse, argues that the circulation and accumulation of capital cannot abide limits; whenever it encounters a limit, it turns them into barriers that then could be transcended or by-passed. At this point, Marx cites Hegel's Science of Logic as a footnote: ‘something's own boundary posited by it as a negative which is at the same time essential, is not merely boundary as such but barrier … and it does overcome it’ (Hegel in Marx, 1993: 334). Marx adapts the argument for capital: ‘capital is the endless and limitless drive to go beyond its limiting barrier … Every limit appears as a barrier to overcome’ (1993: 334 and 408). Capital is thusly conceptualised as a social force devoted to transcend every limit it encounters in order to expand itself continuously. 6 This type of linear reading of the development of capitalism is evident in Lenin's (1899) The Development of Capitalism in Russia in which he considered the expropriation of peasants as a “positive” and inevitable process in the creation of capitalist market in Russia. The “distinctive quality” of the Marxian limit which is tried to be overcome by capital through the strategies of ex-novo separation pertains to the tendency of workers' open-direct access to social wealth that is not mediated by the natural laws of capitalist mode of production. When capital's eternal desire to colonise and accumulate is constrained or threatened by the workers, capital encounters with an alarming situation. In cognitive capitalism, the becoming-centrality of the common provides a political opportunity for workers to invert the essential separation and claim their autonomy in relation to capital. In this context, capital strives to separate people ex-novo from the growing common forms of wealth by mobilising aggressive commodification strategies such as intellectual property rights. 3.1. A structural contradiction: the enclosure of the common through intellectual property rights From the standpoint of classical economics and property law, the system of private property (be it real estate or intellectual property) rights is based on two levels of provisions. The first level concerns the rules, norms, conventions, laws, etc. (these are the forms of obligations in differing intensity) that establish the usus (the delimitation of uses), fructus (the exclusive right to enjoy), and abusus (the alienability; the ability to exchange at mutually agreeable terms) of goods, where good is understood to be anything that is recognised as an object of economic, symbolic or social value (Alchian, 2019). The second level concerns the institutional arrangements, that is, the conditions for the enforcement of those laws, rules, and so forth. These two levels are interrelated inasmuch as if the forms of obligation are ignored, they fall into disuse and the character of enforcement is rendered obsolete. In industrial capitalism, on the whole, the jurisdictional and institutional arrangements which inform the nature and execution of private property rights in general, and intellectual property rights in particular were not a subject of major debate for two reasons. First, in industrial capitalism ‘the production of wealth and value is [largely] based on material production and manual labour’ (Morini and Fumagalli, 2010: 235) and, accordingly, the volume of “intellectual” products such as knowledge(s), designs, ideas, codes, images along with the artefacts which are innately not separable (divisible), rival, and excludible was quite limited. **Second, the formation of monopoly with regard to the trade of intellectual products was firmly established and regulated by the system of i) patents, ii) trademarks/branding, and iii) copyrights**. These mechanisms secured the unity of usus, abusus and fructus of intellectual goods and enabled the transformation of them into scarce goods on the market, thusly providing the tenant of IPR legal right to have monopoly. The evolving technical means of reproduction surely challenged the IPR enforcement by overstepping the legal apparatuses, which was followed by a new writing of the law(s). In cognitive capitalism, the issue of IPR, has become a central topic. The legal proceedings and the increasing court cases over the conflicts of IPR are indeed everywhere (Reuters, 2014). It is not a coincidence that in 1996, a journal was launched which was dedicated to this subject (i.e. Journal of Intellectual Property Rights). Here, we may underline two main interrelated reasons. Firstly, as discussed in the previous sections, the value and wealth have increasingly come to rest on immaterial production (and its intellectual products) which is increasingly **conducted within and through the common. This corresponds to the tendency of workers' re-appropriation of intellectual powers of production, reversal of workers' separation from the means of production, and hence their increasing autonomy in terms of production relations; a tendency which creates a distressing situation from the perspective of capital.** This “distressing” situation, secondly, was raised to an “alarming” situation with the tendential breakdown of the strong links between usus, fructus, and abusus, which was engendered by the force of digital revolution. The new information and communication technologies transformed the results of immaterial production (i.e. intellectual products) into a sequence of binary digits via, for instance, software compression and encryption. In the digital world, the reproduction which is based on meta-data is virtually identical with the original, whereas in the analogical world the latter is always distinguishable, for it is necessary to utilise a physical medium (e.g. tape recorder) for the process of its reproduction. Since the digital data could be coded in the digital media, reproduced, and delivered virtually at zero marginal cost, the inversion of scarcity of creative, social, knowledge commons in relation to intellectual goods has come to the forefront. The rise of ‘digital multitudes’, the elimination of the limits to reproduction, the inversion of scarcity of commons, the developments in the capacity for the repository of intellectual goods have culminated in the ‘limited user rights, conditional fructus, and non-alienability’ (Boutang, 2011: 106) of intellectual goods. As a response to this “alarming” situation, we have witnessed an aggressive plan directed towards enclosing the commonality of immaterial production through IPR. To mention a few, some strict measures [i.e. laws and treaties] were set out, via the World Trade Organisation (WTA), in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), as finalised at the Marrakesh Agreement in 1994. The measures were then strengthened in Doha Development Rounds. In 1998, Digital Millennium Copyright Act (DMCA) passed in the United States, followed by the European Union Copyright Directive in 2001. The final version of the Directive on Copyright in the Digital Single Market by EU was approved on 26 March 2019. According to the World Intellectual Property Organisation (WIPO), there are currently twenty-six international intellectual laws, treaties and conventions, binding 191 member-states legally. In cognitive capitalism, nevertheless, the process of enclosure through enforcement of IPR manifests a paradox or, using Marxian terminology, a structural contradiction in two ways. First, **capital's attempts to enclose the commons through IPR in order to (re)establish hegemony over intellectual powers of production actually inhibits the development of productive forces, and thereby capital prepares its own social crisis in terms of established relations of production. Second, the enclosure through IPR curtails the business opportunities in terms of innovation, profit-making, and growth. In what follows, I will discuss these two critical points.** Marx's (1977) theory of societal transformation has three key elements which are articulated in the Preface to A Contribution to the Critique of Political Economy. 7 Human beings produce their livelihoods by working together. The way in which this production is organised becomes objectified into certain relations of production which are administered by a ruling class that exploits the people at the bottom - as in the cases of feudalist and capitalist relations of production. The ruling class then institutes a political and ideological superstructure, diffusing and imposing certain ways of thinking and living, to maintain the exploitation process. However, Marx notes, there is a tendency in human history for human beings to create new ways of producing which confront both the existing relations of production and superstructure, that is, a tendency which might result in a crisis and class struggle for the transformation of the mode of production. Harman and Brenner (2006, para. 25) recapitulates Marx's argument well: ‘the rise in the forces of production begin to change relations of production at the micro level, which then challenges the wider relations of production, the political superstructures and the ideologies of the older order [and in turn class relations], which lead to potentially revolutionary upheavals’. Marx's general theory of social transformation is articulated in his and Engels's (2004) reading of the transition from feudal mode of production to the capitalist mode of production. Marx and Engels discuss how feudal relations could not contain already developed productive forces in itself and thereby was inevitably superseded by a new relation of property, to wit capitalist relations of property. In particular, they state that: We see then: the means of production and of exchange, on whose foundations the bourgeoisie built itself up, were generated in feudal society. At a certain stage in the development of these means of production and exchange, the conditions under which feudal society produced and exchanged, the feudal organisation of agriculture and manufacturing industry, in one word, the feudal relations of property became no longer compatible with the already developed productive forces; they became so many fetters. They had to be burst asunder; they were burst asunder. (Marx and Engels, 2004: 9–10, emphasis added) The significant question is, then, whether the social productive forces, or rather the human, social, and subjective powers are in a process of being fostered, expanded, and developed to their fullest in a particular mode of production. To put it differently, the question is really concerned with whether the enclosure of the common via IPR contradicts with the expansion of human, social, and subjective forces in cognitive capitalism. We have argued in the first section of this article that immaterial labour performs creatively and productively only within and through the common. In a plain expression, the production process begins with an access to the common resources and, at the end of the process, provides much-enriched common which, in turn, must be open and directly accessible to be the foundation for a new cycle of production. An undisturbed accumulation of the common, in my point of view, corresponds precisely to the development of social productive forces. By immaterial production or by accumulation of the common wealth, it is meant not solely some quantitative expansion of our forces (e.g. more information, more knowledge) but also, and above all, that ‘our powers and senses increase: our powers to think, to feel, to see, to relate to one another, to love’; that is, our relational and productive qualities and capabilities (Hardt and Negri, 2009: 283). At a higher-level of abstraction, immaterial production comes to convey not the production of objects for subjects but the production of forms of life, subjectivity: the bios. Hardt and Negri reflect on immaterial production through the term of biopolitical production and put that: ‘the immaterial production … [is] the the production of subjectivity through the common and the production of common through subjectivity … [a blockage in the common] should be understood, then, as a blockage in the production of subjectivity’ (2009: 299–300). From this perspective, the enclosure of the common should be considered a structural fetter on the development and growth of human beings. In particular, **intellectual property rights act as forms of structural restraints for the expansion and development of productive forces.** They block the qualities and capabilities, that is, the very human potentiality of wage-workers. They precisely interrupt the Foucauldian circuit in which l'homme produit l'homme (man produces man). In this regard, it is fair to state that by imposing IPR, capital prepares its own social crisis in terms of established capitalist relations of production. Furthermore, the enclosure through IPR hinders the opportunities for innovation, profit-making, and growth. From the perspective of neoclassical economics, Boldrin and Levine (2002, 2010) challenge the ‘common argument [that] the presence of strong intellectual property rights spurs innovation leading to higher economic growth and increasing benefits for all’ (2002: 209). By drawing on quantitative models, they analyse the difference between property rights applied to material and immaterial goods and show that IPR constitute a monopoly, ‘intellectual monopoly’, ultimately hindering free market, competition, growth, and wealth. Again, from the perspective of neoclassical economics, Lerner examines the impact of IPR policy shifts in 60 nations over the past 150 years and finds a ‘lack of a positive impact of strengthening of patent protection on innovation’ (2009: 347), which is key for profit making and economic growth. Martin (1998) inquiries into the relationship between IPR and innovation from a different perspective. By using real-life cases, he demonstrates how big companies purchase someone else's idea to inhibit other companies from transforming this idea to an innovative product and selling it on the market as a competitor of their product. Along the same lines, Baker, Jayadev and Stiglitz's comprehensive -policy- paper argue that ‘the current global regime of intellectual property rights is inadequate in serving the purpose of development and welfare … both in developed and developing countries’ (2017: 7). They state that ‘if **the knowledge economy and the economy of ideas is to be a key part of the global economy and if static societies are to be transformed into ‘learning societies’ that are key for growth and development, there is a desperate need to rethink the current regime [of IPR]’ (2017: 7).** The famous Manchester Manifesto, signed by fifty international scholars from various disciplines, underlines ‘the significant drawbacks’ of IPR in ‘its effects on economic efficiency’ (2009: 2), especially in terms of ‘reducing competition and allowing large companies to dominate markets’ (2009: 4). My own perspective is informed by Boutang (2011, 2013) who underscores ‘the absolute and internal need for this kind of capitalism, cognitive capitalism’ to disclose, that is to say ‘to create the spaces [the commons in general] of liberty and new digital commons as a fundamental and inescapable condition for extracting value’ (Boutang, 2013: 90). He grounds his argument in the idea of ‘human pollination’. We have noted that the originality of cognitive capitalism ‘consists in capturing, within a generalised social activity, the innovative elements which produce value’ (Negri, 2008: 64). In other words, economic value depends increasingly on the pollination of “human bees”, interacting and participating within and through the common. The remarkable difference between industrial capitalism and cognitive capitalism lies in the fact that ‘the former needed to destroy the ancient commons in order to transform the independent worker into proletariat whereas the later requires disclosure and constitution of a new kind of commons (Boutang, 2013: 90–1). From the perspective of capital, therefore, the implementation of IPR blocks the common's richness, and this is another way of saying farewell to the profit opportunities offered by the knowledge society. 4. Conclusion Is the implementation of intellectual property rights a socio-economic need -as it is largely advocated in the literature? Focusing on the contemporary state of socio-economic affairs, informed by cognitive and digital turn, this article attempted to provide an autonomist Marxist critical update on the concept of intellectual property rights, and argued that the **enclosure of commons through the strict regime of intellectual property rights acts as a barrier before economic health**. By economic health, we should not understand the present-day performance of an economy identified by a set of quantitative indicators such as gross domestic product, country deficit, inflation-rate, currency rate, and so forth. According to Schumpeter, ‘capitalist performance is not even relevant for prognosis’ of capitalism's future (2010: 115). Economic health, rather, concerns the question of whether there exists a structural contradiction acting as a fetter on the development of productive forces and economic growth. In this regard, this article argued that the regime of intellectual property rights, directed towards separating workers from the ownership of new means of production, does not only curtail the actualisation of workers' potentiality and block the development of productive forces but it also curtails the socio-economic opportunities for innovation, profit-making, and growth.

**IP protections reproduce divisions in the class struggle, splitting society into two hostile classes and creating both a market of abundance and one where knowledge and cognitive capital are in scarcity.**

**Krikorian 10 (Gaelle Krikorian, Amy Kapzynski,  Access to Knowledge in the Age of Intellectual Property - Free-Trade Agreements and Neoliberalism: How to Derail the Political Rationales that Impose Strong Intellectual Property Protection. 2010)//wwST**

These workers represent a classical form of proletariat that does not possess capital and is under the rules of free trade particularly vulnerable to exploitation. At the same time, by means of intellectual property protections, free-trade agreements help to exclude this population from the most liberating and creative dimensions of “cognitive capitalism,” the capacity to use nonmaterial resources to produce freely, without restriction and for one’s own interest.65 A cognitive proletariat thus exists under the “information feudalism” described by Drahos and Braithwaite. It consists of women and men who manufacture jeans or DVDs, auto parts, electronic chips, or medicines and who, under the rules of intellectual property, are denied the access to knowledge that would allow them to be more than simple consumers with limited access to physical goods.66 Indeed, the knowledge—the cognitive capital—necessary for them to develop their own products and to produce and sell them at cheap prices to their own advantage is instead confiscated by law.67 The valorization of privatized knowledge further dissociates the value that is attributed to a good on the market from the amount of social labor time necessary to produce it and from the simple cost of production. This affects immaterial goods (the price of a text message, for example), as well as material goods defined by immaterial qualities (the price for a pair of brand-name jeans, the cost of a patented drug). However, this is not the sort of liberation from the rule of valuation that puts abundance within the reach of the multitude.68 The implementation of intellectual property rules compartmentalizes access both to knowledge and to what can be produced or invented with acquired knowledge. Intellectual property barriers reinforce the partition of society into categories of individuals—at least two for each type of goods: those who access the knowledge and the goods and those who do not or do not do so fully. Two different realities thus coexist: a market of abundance, where money, goods, and ideas flow, and a restricted market, where scarcity is the result of the limited capacity of those who constitute it to accumulate and use cognitive capital and to afford goods. We might draw an analogy with Marx’s analysis of the class struggle and say that we see the information society “splitting up into two great hostile camps”69 under the rule of cognitive capitalism and neoliberalism. However, this class structure cleaves the traditional social classes according to new divides that do not correspond to the habitual fault lines, even if they also highlight them occasionally, since what distinguishes people is not necessarily their ability to possess knowledge, but also their capacity to control nonrival knowledge or make use of it.

#### Capitalism causes massive violence and inevitable extinction – the fundamental task is developing tools for organization and tactics to bring about revolution.

Escalante 19 [Alyson, revolutionary Marxist (duh), philosophy at U of Oregon. 09/08/2019. “Truth and Practice: The Marxist Theory of Knowledge”. https://web.archive.org/web/20190910040756/https://failingthatinvent.home.blog/2019/09/08/truth-and-practic-the-marxist-theory-of-knowledge/] pat

The world we live in today is in a dire state. Climate destruction continues at a fast pace, and every with every passing day, capitalism proves itself to be incapable of addressing this. Capitalist production and its endless drive for resources to match artificial market demands has created a climate crisis that leaves us on the brink of potential extinction. Governments around the world are turning to far right and fascist leaders to assuage their fears of an uncertain future, and the most marginalized and oppressed suffer because of it. Fascism is on the rise, and history tells us very clearly what that can result in without opposition. The decaying US empire continues to lash out in violence across the globe in a desperate attempt to re-assert its power and hegemony. Whole countries are destroyed in its desperate bids for more fossil fuels. The world burns from America’s white phosphorus weaponry. The need for a revolutionary movement capable of replacing capitalism with something better has never been so clear. The choice between socialism or barbarism has never been so stark. More and more people are starting to realize that reform cannot save us, that capitalism and imperialism themselves are the problem, and that we must unite and band together to fight for a better world. The question then is: how will we know what strategies, what tactics, and what ideas to unite around? If the skeptics and postmodernists are correct that knowledge is always relative and localized, then we cannot built a global and universal strategy to unite around. If they are correct then we are doomed to small acts of localized or individual resistance in the face of apocalypse. To embrace such a vision of the world (with its accompanying epistemological skepticism) is to embrace defeat. The masses do not want to embrace defeat, they want to know how to fight back. Marxism can provide the tools necessary to engage in that fight. Marxism, with its self criticism and its insistence on incorporating the valuable ideas of its critics has created a means for unifying workers across the globe with anti-colonial and anti-imperialist struggles. The Marxist belief in the possibility of true ideas, tested and verified in practice, creates the possibility for unity on a global scale. The scientific status of Marxism means that as our climate changes, as our world looks more and more grim, Marxism will adapt through struggle and practice; it will provide us with the ideas and tools we need to fight and win. There will be no victory for the workers of the world without the ability to wield a revolutionary science. What is at stake in questions of Marxist epistemology is the very possibility of creating a philosophical and scientific basis for revolution. We must defend this possibility. We must defend the scientific status of Marxism, and must insist on the possibility of victory.

### Method

#### We must speak the language of power to redirect state policy against itself, to persuade those who hold power to pull the levers in a way that would be detrimental to the empire. This tactic is preferable to outright resistance which fails and is coopted

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Infiltration: a word that may evoke a host of thoughts and fantasies from soldiers operating behind enemy lines, police informants gaining access to criminal organizations, or to scenarios of radicals inserting themselves into corporations or research labs. Whatever the scenario, infiltration can be tactic that anarchists pursue when thinking about operating within current institutional realities, especially if interested in teaching in public schools. Although this claim is entangled within complex relationships of power and privilege, struggle arises wherever domination coalesces, especially within institutional structures and settings (Sharp, Routledge, Philo & Paddison, 2000). Power conjures, “the threadings, knottings and weavings” of social relationships through a intertwining of the social, political, moral, educational, and historical realities of a given society. In this way, power is “crucially and unavoidably spun out across and through the material spaces of the world” (Sharp, et al., 2000, p. 22). This chapter thus looks to situate itself and build radical pedagogy within the threads and knots of contemporary relationships of power; inbetween what Holloway (2010) has called the “cracks” of capitalism, trying to “desperately find . . . faults beneath the surface, or to create cracks by banging the walls” (p. 8). Cracks have emerged through environmental disaster, economic collapse, psychological alienation, a crisis of identity, and decades of war and imperial aggression conducted by the West. It is under these historical conditions that resistance needs to be conceptualized. Creating, finding and exploiting “cracks” within a diffused and networked capitalism demonstrates that dated narratives of revolutionary struggle are no longer viable and there is “no guarantee of a happy ending” (Holloway, 2010, p. 9). Unfortunately, although these narratives may provide comfort amid an onslaught of capitalism, war, death, terror, and alienation, they do not open up, nor allow, alternative possibilities of resistance to form outside the boundaries they construct. In some ways, these may only help to reproduce the current order we find ourselves in. This does not mean that we should resign ourselves to the throngs of nihilistic defeat, as there is indeed potential for radical hope within the cracks of Empire. The multitude, with its potential for infinite possibilities, can build a complex and dispersed resistance through the breaks, tears, and folds of our social order (Deleuze, 1992), and the tactics and pedagogies that we envision as radicals can attempt to capture this spirit. Although the manifestations of these cracks and folds is yet to be seen, I leave the reader to their own radical imaginations in devising ways to subvert a networked and diffused machine (Shukaitis, 2009). Evoking the metaphor of a “machine,” as I describe the multifaceted nature of contemporary capitalism, harkens to Trotter’s (1990) claim that colonialism operated in a very similar way, divorced from individual interactions and operating abstractly through “official” and “unofficial” discourses, forms of knowledge, ways of knowing, the morality of a given era, and the reproduction of knowledge to name a few. The analogy of a machine also challenges that human agency is solely at the center of how social system operate, because machines, “create, distribute, and organize populations and impose regimes of conduct, agency and effectivity” outside of individual actors and agency (Grossberg, 2010, p. 36). Radicals (within and outside the labor movement) had ingenious ways in which to deal with the machines of capitalism, occurring through tactics that spanned strikes, sit-ins, walking out, and subversion to even more direct forms like sabotaging machinery, bringing production to a halt. Sabotage is a tactic that anarchists need to rethink in light of how labor is now dispersed among a wide variety of institutional realities (factories, banks, corporations, and public institutions, for example), as well as the contemporary knowledge and abstract economies. The machines of capitalism that produced goods during the height of the Industrial Revolution of the nineteenth century provide us a way in which to think of societal machines and tactics that can be adapted for current conditions. How do we as anarchists, who want to teach and work with students, deal with the contradictions of being located within the same institutions that seek to discipline bodies and coerce us? How do we sabotage these machines and build a radical pedagogy from this perspective? Sabotage provides a provocative conceptual framework in which to think about building alternative forms of resistance and aligns with ways in which anarchists have historically conceptualized direct political action. This is even more interesting when we think of how this will emerge through educational practice, as teaching allows us to directly engage ideology, challenging students’ conceptions about the world around them. With this type of important, dare I say political work, why do some anarchists shun the world of public teaching and service? Education is at the “front lines” of the contemporary ideological war conducted by corporate media, official organs of the State, and influential economic institutions. Whether that emerges through corporate textbooks that omit subaltern experiences and worldviews, standardized testing that stress rote memorization, or a curriculum that reproduces Eurocentrism and Western ways of knowing, education is invested in reproducing dominant conceptions of the world. However, sabotage can take myriad forms, and this chapter will build on the conceptual idea of building politics of infiltration. It has been well established that police and other State agents have infiltrated radical political movements, especially with the rise of anarchist praxis over the past two decades (Borrum & Tilby, 2004). Anarchists should think about assuming this same tactic, using the idea of infiltration as a guiding way to think about our praxis within institutional realities and as a way to think about diffused forms of sabotage. Although anarchism is rife with identity and lifestyle politics that detests any signs of “selling out,” this has only proven to further marginalize us in the eyes of the larger society that we must work at convincing how terribly oppressive the current social arrangement is. In the end, our movement is going to have to be broadbased and span multiple identities, social locations, political affiliations, and a renewed sense of politics that seeks to look at how, “the contemporary world has been made to be what it is [and] make visible ways in which it can become something else” (Grossberg, 2010, p. 1). Stoler (2010) discusses the idea of reading and analyzing “against the grain” of archival documents to unearth new interpretations and voices. This chapter urges radicals to think of our social actions along these same lines of thought: against the grain of dominant ideologies that serve to support historically oppressive realities. In this chapter, I will attempt to propose a politics of infiltration through a peculiar anarchist lens that seeks to subvert capitalism and its accompanying institutional realities through a diffused resistance stemming from bodies; bodies immersed in oppressive institutional realities. I dance through theoretical traditions to demonstrate how infiltration can be conceptualized as not only a physical practice (such as our work in classrooms), but also can be a theoretical framework in which to situate our practice, always looking for cracks, weaknesses, and oppor- tunities to sabotage dominant conceptions of the world that demonstrates another world is possible. Although radicals may think of this action as “selling out,” I want to reframe teaching and working within institutions as a potential form of infiltration, inserting other ways of knowing and being into the academy to challenge systemically oppressive realities. Shannon (2009) reminds us that cooptation lurks around every corner and Shukaitis (2009) warns us of the recuperative nature of capitalism. Both of these realities are firmly acknowledged as risks, however, it should not immobilize us into inaction. Nor should this resign us to “ghettoizing” ourselves into intellectual enclaves where conversations are more about nodding our collective heads in agreement rather than challenging our own practices with alternative voices and tactics. Indeed, tensions can be the basis for a critical reflection about what we are actually doing in our practice and engaging a wide variety of techniques and approaches to explore these, such as writing and political organization. Communities of practice, whether in activism or through qualitative research, are an essential feature of building bridges with other like-minded activists and scholars (Rossman & Rallis, 2003). Cooptation and recuperation are indeed challenges we will face but should not stop us from doing something, keeping in mind the question that Lorde (2003) had when she struggled with the tools of the master (p. 25). This chapter will hopefully allow the conversation to continue about the role of anarchist theory in building alternative forms of praxis, pedagogy, and direct action, especially within the context of public education and the contradictions that anarchists face within hierarchical and coercive institutions.

#### Subversion requires policy-centered scenario planning. We need to imagine potential futures to specify the locations of our interventions. Knowing what capabilities are at the states’ disposal are critical to turning those capabilities against them.

Barma et al. 16 (Naazneen Barma, PhD in Political Science from UC-Berkeley, Assistant Professor of National Security Affairs at the Naval Postgraduate School, Brent Durbin, PhD in Political Science from UC-Berkeley, Professor of Government at Smith College, Eric Lorber, JD from UPenn and PhD in Political Science from Duke, Gibson, Dunn & Crutcher, Rachel Whitlark, PhD in Political Science from GWU, Post-Doctoral Research Fellow with the Project on Managing the Atom and International Security Program within the Belfer Center for Science and International Affairs at Harvard, May 2016. “‘Imagine a World in Which’: Using Scenarios in Political Science,” International Studies Perspectives 17 (2), pp. 1-19, <http://www.naazneenbarma.com/uploads/2/9/6/9/29695681/using_scenarios_in_political_science_isp_2015.pdf>)

Over the past decade, the “cult of irrelevance” in political science scholarship has been lamented by a growing chorus (Putnam 2003; Nye 2009; Walt 2009). Prominent scholars of international affairs have diagnosed the roots of the gap between academia and policymaking, made the case for why political science research is valuable for policymaking, and offered a number of ideas for enhancing the policy relevance of scholarship in international relations and comparative politics (Walt 2005,2011; Mead 2010; Van Evera 2010; Jentleson and Ratner 2011; Gallucci 2012; Avey and Desch 2014). Building on these insights, several initiatives have been formed in the attempt to “bridge the gap.”2 Many of the specific efforts put in place by these projects focus on providing scholars with the skills, platforms, and networks to better communicate the findings and implications of their research to the policymaking community, a necessary and worthwhile objective for a field in which theoretical debates, methodological training, and publishing norms tend more and more toward the abstract and esoteric. Yet enhancing communication between scholars and policymakers is only one component of bridging the gap between international affairs theory and practice. Another crucial component of this bridge is the generation of substantive research programs that are actually policy relevant—a challenge to which less concerted attention has been paid. The dual challenges of bridging the gap are especially acute for graduate students, a particular irony since many enter the discipline with the explicit hope of informing policy. In a field that has an admirable devotion to pedagogical self-reflection, strikingly little attention is paid to techniques for generating policy-relevant ideas for dissertation and other research topics. Although numerous articles and conference workshops are devoted to the importance of experiential and problem-based learning, especially through techniques of simulation that emulate policymaking processes (Loggins 2009; Butcher 2012; Glasgow 2012; Rothman 2012; DiCicco 2014), little has been written about the use of such techniques for generating and developing innovative research ideas. This article outlines an experiential and problem-based approach to developing a political science research program using scenario analysis. It focuses especially on illuminating the research generation and pedagogical benefits of this technique by describing the use of scenarios in the annual New Era Foreign Policy Conference (NEFPC), which brings together doctoral students of international and comparative affairs who share a demonstrated interest in policy-relevant scholarship.3 In the introductory section, the article outlines the practice of scenario analysis and considers the utility of the technique in political science. We argue that scenario analysis should be viewed as a tool to stimulate problem-based learning for doctoral students and discuss the broader scholarly benefits of using scenarios to help generate research ideas. The second section details the manner in which NEFPC deploys scenario analysis. The third section reflects upon some of the concrete scholarly benefits that have been realized from the scenario format. The fourth section offers insights on the pedagogical potential associated with using scenarios in the classroom across levels of study. A brief conclusion reflects on the importance of developing specific techniques to aid those who wish to generate political science scholarship of relevance to the policy world. What Are Scenarios and Why Use Them in Political Science? Scenario analysis is perceived most commonly as a technique for examining the robustness of strategy. It can immerse decision makers in future states that go beyond conventional extrapolations of current trends, preparing them to take advantage of unexpected opportunities and to protect themselves from adverse exogenous shocks. The global petroleum company Shell, a pioneer of the technique, characterizes scenario analysis as the art of considering “what if” questions about possible future worlds. Scenario analysis is thus typically seen as serving the purposes of corporate planning or as a policy tool to be used in combination with simulations of decision making. Yet scenario analysis is not inherently limited to these uses. This section provides a brief overview of the practice of scenario analysis and the motivations underpinning its uses. It then makes a case for the utility of the technique for political science scholarship and describes how the scenarios deployed at NEFPC were created. The Art of Scenario Analysis We characterize scenario analysis as the art of juxtaposing current trends in unexpected combinations in order to articulate surprising and yet plausible futures, often referred to as “alternative worlds.” Scenarios are thus explicitly not forecasts or projections based on linear extrapolations of contemporary patterns, and they are not hypothesis-based expert predictions. Nor should they be equated with simulations, which are best characterized as functional representations of real institutions or decision-making processes (Asal 2005). Instead, they are depictions of possible future states of the world, offered together with a narrative of the driving causal forces and potential exogenous shocks that could lead to those futures. Good scenarios thus rely on explicit causal propositions that, independent of one another, are plausible—yet, when combined, suggest surprising and sometimes controversial future worlds. For example, few predicted the dramatic fall in oil prices toward the end of 2014. Yet independent driving forces, such as the shale gas revolution in the United States, China’s slowing economic growth, and declining conflict in major Middle Eastern oil producers such as Libya, were all recognized secular trends that—combined with OPEC’s decision not to take concerted action as prices began to decline—came together in an unexpected way. While scenario analysis played a role in war gaming and strategic planning during the Cold War, the real antecedents of the contemporary practice are found in corporate futures studies of the late 1960s and early 1970s (Raskin et al. 2005). Scenario analysis was essentially initiated at Royal Dutch Shell in 1965, with the realization that the usual forecasting techniques and models were not capturing the rapidly changing environment in which the company operated (Wack 1985; Schwartz 1991). In particular, it had become evident that straight-line extrapolations of past global trends were inadequate for anticipating the evolving business environment. Shell-style scenario planning “helped break the habit, ingrained in most corporate planning, of assuming that the future will look much like the present” (Wilkinson and Kupers 2013, 4). Using scenario thinking, Shell anticipated the possibility of two Arab-induced oil shocks in the 1970s and hence was able to position itself for major disruptions in the global petroleum sector. Building on its corporate roots, scenario analysis has become a standard policymaking tool. For example, the Project on Forward Engagement advocates linking systematic foresight, which it defines as the disciplined analysis of alternative futures, to planning and feedback loops to better equip the United States to meet contemporary governance challenges (Fuerth 2011). Another prominent application of scenario thinking is found in the National Intelligence Council’s series of Global Trends reports, issued every four years to aid policymakers in anticipating and planning for future challenges. These reports present a handful of “alternative worlds” approximately twenty years into the future, carefully constructed on the basis of emerging global trends, risks, and opportunities, and intended to stimulate thinking about geopolitical change and its effects.4 As with corporate scenario analysis, the technique can be used in foreign policymaking for long-range general planning purposes as well as for anticipating and coping with more narrow and immediate challenges. An example of the latter is the German Marshall Fund’s EuroFutures project, which uses four scenarios to map the potential consequences of the Euro-area financial crisis (German Marshall Fund 2013). Several features make scenario analysis particularly useful for policymaking.5 Long-term global trends across a number of different realms—social, technological, environmental, economic, and political—combine in often-unexpected ways to produce unforeseen challenges. Yet the ability of decision makers to imagine, let alone prepare for, discontinuities in the policy realm is constrained by their existing mental models and maps. This limitation is exacerbated by well-known cognitive bias tendencies such as groupthink and confirmation bias (Jervis 1976; Janis 1982; Tetlock 2005). The power of scenarios lies in their ability to help individuals break out of conventional modes of thinking and analysis by introducing unusual combinations of trends and deliberate discontinuities in narratives about the future. Imagining alternative future worlds through a structured analytical process enables policymakers to envision and thereby adapt to something altogether different from the known present. Designing Scenarios for Political Science Inquiry The characteristics of scenario analysis that commend its use to policymakers also make it well suited to helping political scientists generate and develop policy-relevant research programs. Scenarios are essentially textured, plausible, and relevant stories that help us imagine how the future political-economic world could be different from the past in a manner that highlights policy challenges and opportunities. For example, terrorist organizations are a known threat that have captured the attention of the policy community, yet our responses to them tend to be linear and reactive. Scenarios that explore how seemingly unrelated vectors of change—the rise of a new peer competitor in the East that diverts strategic attention, volatile commodity prices that empower and disempower various state and nonstate actors in surprising ways, and the destabilizing effects of climate change or infectious disease pandemics—can be useful for illuminating the nature and limits of the terrorist threat in ways that may be missed by a narrower focus on recognized states and groups. By illuminating the potential strategic significance of specific and yet poorly understood opportunities and threats, scenario analysis helps to identify crucial gaps in our collective understanding of global politicaleconomic trends and dynamics. The notion of “exogeneity”—so prevalent in social science scholarship—applies to models of reality, not to reality itself. Very simply, scenario analysis can throw into sharp relief often-overlooked yet pressing questions in international affairs that demand focused investigation. Scenarios thus offer, in principle, an innovative tool for developing a political science research agenda. In practice, achieving this objective requires careful tailoring of the approach. The specific scenario analysis technique we outline below was designed and refined to provide a structured experiential process for generating problem-based research questions with contemporary international policy relevance.6 The first step in the process of creating the scenario set described here was to identify important causal forces in contemporary global affairs. Consensus was not the goal; on the contrary, some of these causal statements represented competing theories about global change (e.g., a resurgence of the nation-state vs. border-evading globalizing forces). A major principle underpinning the transformation of these causal drivers into possible future worlds was to “simplify, then exaggerate” them, before fleshing out the emerging story with more details.7 Thus, the contours of the future world were drawn first in the scenario, with details about the possible pathways to that point filled in second. It is entirely possible, indeed probable, that some of the causal claims that turned into parts of scenarios were exaggerated so much as to be implausible, and that an unavoidable degree of bias or our own form of groupthink went into construction of the scenarios. One of the great strengths of scenario analysis, however, is that the scenario discussions themselves, as described below, lay bare these especially implausible claims and systematic biases.8 An explicit methodological approach underlies the written scenarios themselves as well as the analytical process around them—that of case-centered, structured, focused comparison, intended especially to shed light on new causal mechanisms (George and Bennett 2005). The use of scenarios is similar to counterfactual analysis in that it modifies certain variables in a given situation in order to analyze the resulting effects (Fearon 1991). Whereas counterfactuals are traditionally retrospective in nature and explore events that did not actually occur in the context of known history, our scenarios are deliberately forward-looking and are designed to explore potential futures that could unfold. As such, counterfactual analysis is especially well suited to identifying how individual events might expand or shift the “funnel of choices” available to political actors and thus lead to different historical outcomes (Nye 2005, 68–69), while forward-looking scenario analysis can better illuminate surprising intersections and sociopolitical dynamics without the perceptual constraints imposed by fine-grained historical knowledge. We see scenarios as a complementary resource for exploring these dynamics in international affairs, rather than as a replacement for counterfactual analysis, historical case studies, or other methodological tools. In the scenario process developed for NEFPC, three distinct scenarios are employed, acting as cases for analytical comparison. Each scenario, as detailed below, includes a set of explicit “driving forces” which represent hypotheses about causal mechanisms worth investigating in evolving international affairs. The scenario analysis process itself employs templates (discussed further below) to serve as a graphical representation of a structured, focused investigation and thereby as the research tool for conducting case-centered comparative analysis (George and Bennett 2005). In essence, these templates articulate key observable implications within the alternative worlds of the scenarios and serve as a framework for capturing the data that emerge (King, Keohane, and Verba 1994). Finally, this structured, focused comparison serves as the basis for the cross-case session emerging from the scenario analysis that leads directly to the articulation of new research agendas. The scenario process described here has thus been carefully designed to offer some guidance to policy-oriented graduate students who are otherwise left to the relatively unstructured norms by which political science dissertation ideas are typically developed. The initial articulation of a dissertation project is generally an idiosyncratic and personal undertaking (Useem 1997; Rothman 2008), whereby students might choose topics based on their coursework, their own previous policy exposure, or the topics studied by their advisors. Research agendas are thus typically developed by looking for “puzzles” in existing research programs (Kuhn 1996). Doctoral students also, understandably, often choose topics that are particularly amenable to garnering research funding. Conventional grant programs typically base their funding priorities on extrapolations from what has been important in the recent past—leading to, for example, the prevalence of Japan and Soviet studies in the mid-1980s or terrorism studies in the 2000s—in the absence of any alternative method for identifying questions of likely future significance. The scenario approach to generating research ideas is grounded in the belief that these traditional approaches can be complemented by identifying questions likely to be of great empirical importance in the real world, even if these do not appear as puzzles in existing research programs or as clear extrapolations from past events. The scenarios analyzed at NEFPC envision alternative worlds that could develop in the medium (five to seven year) term and are designed to tease out issues scholars and policymakers may encounter in the relatively near future so that they can begin thinking critically about them now. This timeframe offers a period distant enough from the present as to avoid falling into current events analysis, but not so far into the future as to seem like science fiction. In imagining the worlds in which these scenarios might come to pass, participants learn strategies for avoiding failures of creativity and for overturning the assumptions that prevent scholars and analysts from anticipating and understanding the pivotal junctures that arise in international affairs.

#### Our 1AC incentivizes a method of role experimentation which primes us for sabotage once we leave debate - we will inevitably find ourselves plugged into institutions in some way shape-or-form, only our aff provides a habitus to challenge those roles.

Connolly 13 (William E. Connolly, Krieger-Eisenhower Professor of Political Science at Johns Hopkins University, The Fragility of Things: Self-Organizing Processes, Neoliberal Fantasies, and Democratic Activism, Duke University Press, 2013, 186)

There is no zone of complete neutrality in a world of role performances. Obedient performances in cumulative effect tend to support the existing regime as they insinuate its dictates into our collective habits of perception, judgment, and action. Unless a dissident group of workers meticulously “works according to rule” to disrupt production through excruciating obedience in a way that discloses how tangled formal rules can become. Or a group creatively improvises on the performance of Bartleby the Scrivener, posing endless questions about the orders given to it until the machine overflows itself or is jammed. These indeed are creative role experimentations. So was the practice in Eastern Europe during the late stages of Soviet rule to clap endlessly when a Soviet stooge spoke, until the bewildered speaker was moved to sit down amid the roar around him. I recently attended a faculty meeting with the president of my university at which the entire faculty remained silent after his Ceo-style talk ended and he departed slowly up the aisle. Sometimes silence sends a message to power. Our lives are messages.5 Role experimentation can disrupt and redirect the flow of authority, habit, institutional regularity, and future projection. It can also encourage others to look more closely at their own performances in this or that domain. Such experiments can also set the stage for more adventurous and larger scale actions. My examples will be limited to con- stituencies who are the most apt to read this book, though they could easily be adjusted to a broader array. Suppose a constellation of students, studying to enter professional life, forms study groups to explore more closely how those professions presuppose and enforce a set of practices that contribute to the fragility of things as they simultaneously draw attention away from that contribution. The students may pose untimely questions in their political science, economics, engineering, medical, business, legal, and biology classes. If in a secular institution, they may seek out courses that complicate the assumptions of secularism. If in a religious school, they may organize a group to explore the history of atheism or of minority faiths that eschew the theme of a per- sonal God. They can engage experimental artistic work that stretches their habitual patterns of perception and judgment. The nature- and soundscape compositions of John Luther Adams have salutary effects on many in this respect. Such activities can also prime you to experiment with other role performances once you enter professional life. If a lawyer, you may organize to rethink your connections to the ugly prison system and to adjust your practice to protest its ugliness. Or you may give a portion of your time to challenge corporations, localities, and states that defile the environment. If a doctor, you may organize voluntary medical care for the poor and publicize what you are doing. In both cases these experimentations make a modest difference on their own, prime our capacities for more sensitive perception in other domains of life, and may prepare us to participate with others in yet more adventurous activities. These are minor moments, but an accumulation of minor moments can jostle settled habits of perception; they can encourage a readiness to become more exploratory; and they can extend the time horizon within which we think and act. Suppose, now, you are middle- or upper-middle-class citizens in a polity that has competitive elections. You have become increasingly dissatisfied with the course your society is taking. Voting, while pertinent, seems radically insufficient to the issues involved. Its time horizon is too short and the strategic place of ill-informed undecided voters in electoral politics skews campaigns too sharply. Inequality has been extended. The lower reaches of society are left out in the cold and often blamed for the suffering they undergo. The news media are organized around scandal and a brief time horizon. Racial differences are exploited to break up potential coalitions on the left. A large slice of the population is periodically suscep- tible to war fever. Climate change is widely subjected to deferral, denial, or formal acceptance disconnected from action. And the right wing actively promotes filibusters and legislative stalemates to encourage more and more people to withdraw from citizenship and to tolerate the privatization of more and more of life. The sciences and professions with which you are familiar are often too narrowly defined. Too many churches either provide refuges from the world or serve as sites of aggressive attack on ecological concerns, homosexu- ality, carriers of alternative faiths, or poor minorities. You know what po- litical party you support; you vote regularly; and you give time and money to your party. But you also find it difficult to connect the sentiments you profess to the role expectations sedimented into your practices of work, church, consumption, neighborhood association, investment portfolio, children’s school, artistic pursuits, and local news reporting. Now is the time to join others in becoming role experimentalists. You may actively support the farm-to-table movement in the restaurants you visit; you may support the slow food movement; you may frequent stores that offer food based on sustainable processes; you may buy a hybrid or, if feasible, join an urban zip-car collective, explaining to friends, family, and neighbors what effect such choices could have on late modern ecology if a majority of the populace did one or the other; you may press your neighborhood association and workplace to buy solar panels and install them yourself; you may use writing and media skills developed in school to write for a blog; you may shift a large portion of your retirement account into investments that support sustainable energy; you may withdraw from aggressive investments that presuppose an unsustainable growth pattern, threaten economic collapse, and/or undermine the collec- tive future; you may bring new issues and visitors to your church, temple, or mosque to support rethinking about interdenominational issues and the contemporary fragility of things; you may found, join, or frequent a repair club, at which volunteers collect and repair old appliances, furni- ture, and vehicles to cut back on urban waste and increase the longevity of these items; you may probe and publicize the multimodal tactics by which twenty-four-hour news stations work on the visceral register of their viewers, as you explore ways to counter those techniques; you may travel to places where unconscious American assumptions about world entitlement are challenged on a regular basis; you may augment your pattern of films and artistic exhibits attended to stretch your habitual powers of perception and to challenge some affect-imbued prejudgments embedded in them; you may seek out new friends who are also moving in these directions. You may regularly relay pregnant essays you encounter to friends, colleagues, and relatives. A series of minor role experiments. As we proceed our aspirational selves may now begin to exceed our operational selves, and the shame we feel about the discrepancy between these two aspects of the self may generate energy to enter into yet new modes of role experimentation.6 We thus begin to make ourselves and our engagements more experimental rather than simply falling into a ready- made set of role expectations. We have begun to become what Nietzsche calls “our own guinea pigs” rather than merely being the guinea pigs of those in charge of these institutions. As such experiments accumulate, the ice in and around us begins to crack. First, the shaky perceptions, feelings, and beliefs with which we started these experimentations now become more refined and more entrenched. Second, we are now better situated to forge connections with yet larger constituencies engaging in similar experiments. Third, as these connections accumulate we may be more inspired to join macropolitical movements that speak to the issues. Fourth, as we now join protests, slowdowns, and confrontational meetings with corporate managers, church leaders, union officials, university officials, and neighborhood leaders, we may now become more alert to the institutional pressures that propel these constituencies forward too. They are also both enmeshed in a web of roles that en- able and constrain them and often more than mere role bearers. These roles too exhibit varying degrees of pressure and slack as they link the details of daily conduct to the strategic practices of the larger political economy.

#### Youth participatory action research enables *transformative resistance* by giving students the tools they need to mobilize collective social change. Research and testing of ideas is crucial to make activism work

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In the Matrix, Morpheus, played by Laurence Fishburne, places Keanu Reeves’ character Neo in a chair to tell him face to face about the real truth of his experience. Morpheus shows Neo a red pill in one hand and a blue one in the other, describing that the red pill will lead him “down the rabbit hole” to the truth while the blue pill will make him forget about their conversation and return everything back to “normal.” Neo looks confused and worried, hesitates for a moment, and then reaches to grab and then swallow the red pill. " e “blue and red pill” scene in ! e Matrix serves as an excellent metaphor for the relationships some educators/activists have with their students, and the kinds of choices we ask them to make. The critical educational experience offered might lead the student “down the rabbit hole” past the layers of lies to the truths of systematic exploitation and oppression as well as possibilities for resistance. A$ er he ingests the red pill, Neo ends up in the place of truth, awakening to the reality that his entire world is a lie constructed to make him believe that he lives a “normal” life, when in reality he is fully exploited day in and day out. What is “normal” is really a mirage, and what is true is the complete structural domination of people, all people. " is book, Revolutionizing Education, literally connects to the metaphorical play on chimera and veracity forwarded by the narrative in ! e Matrix. Examples are presented throughout in which young people resist the 1 normalization of systematic oppression by undertaking their own engaged praxis—critical and collective inquiry, re% ection and action focused on “reading” and speaking back to the reality of the world, their world (Freire, 1993). The praxis highlighted in the book—youth participatory action research (YPAR)—provides young people with opportunities to study social problems

#### The aff is a strategy of “immanent critique” – a strategy of locating particular possibilities for progressive change within the existing system – the most productive application of critical security studies is to move away from universalizing assumptions to focus on particular contingencies and solutions

Browning & McDonald 13 (Christopher S., University of Queensland, c/o Political Science and International Studies and Matt, University of Queensland, “The future of critical security studies: Ethics and the politics of security,” European Journal of International Relations, Vol. 19, No. 2, pg. 248-251)

If the critical security studies project is deficient in providing us with a sophisticated and convincing understanding of either the politics or ethics of security — two core animat - ing themes of its research agenda — where does this leave such a project? Does the contribution of critical security studies extend no further than a compelling critique of traditional approaches to security on a range of analytical and normative grounds? We would argue that there is a future in critical security studies. This future will ulti - mately be determined by the extent to which scholars recognize the limits and tensions of existing approaches (especially ‘Schools’) and take up the challenge of moving beyond first principles or universalized assumptions about security to engage in nuanced, reflexive and context-specific analyses of the politics and ethics of security. Indeed, we make such a case using the critical theoretical tool of immanent critique, defined here as a method of critique concerned with locating possibilities for progressive change in existing social and political orders. 6 In this context, we note in particular the possibility for building upon the tensions and limits in existing critical security studies scholarship to move this research project forward. We identify two key imperatives for this project by way of conclusion. The first of these imperatives concerns the need to develop understandings of the poli - tics of security that are context-specific; that recognize and interrogate the role of differ - ent security discourses and their effects in different settings; and that come to terms with sedimented meanings and logics without endorsing these as timeless and inevitable. In terms of context-specificity, the Western-centric nature of (critical) security studies has ultimately encouraged a focus on how security ‘works’ in liberal democratic settings. This is particularly applicable to the Copenhagen School framework, whose dichotomy between ‘panic politics’ and ‘normal politics’ ultimately suggests a conception of politics parasitic on a liberal democratic political context (see McDonald, 2008; Williams, 2003). While some have attempted to explore securitization dynamics outside these settings (e.g. Wilkinson, 2007), the framework itself continues to work with a security–politics dichotomy that may be wholly unfamiliar to those outside liberal democratic states. In a fundamentally illiberal state regime such as Burma or North Korea, for example, what does the language of security do and what does ‘normal politics’ mean? In what ways do different cultural, social and historical contexts determine different security logics, and how do these dynamics look in terms of communities above and below the state? And can we accept the claim that there is no difference in the logic or effects of securitization if security is understood as referring to the welfare of the most vulnerable in global soci - ety, for example, rather than the territorial preservation of the nation-state? Here, the failure to differentiate between logics of security on the basis of what understanding of security inheres in a particular discourse potentially blinds Copenhagen School and post- structural theorists of security to (the possibility of) difference in security dynamics and logics in different places, for different actors and at different times. In the case of the Copenhagen School, such parsimony might be in part a response to the desire to provide analytical boundaries around the study of security rather than ‘descend’ into contextual analysis (see Williams, 2010: 213–216), but it nonetheless results in a partial and (we would argue) Western-centric image of the politics of security. at University of Kansas Libraries on February 25, 2016 ejt.sagepub.com Downloaded from Browning and McDonald 249 Ultimately, these points suggest the need for far more nuance than is currently evident in critical security studies scholarship. As noted earlier, the critical security studies pro - ject appears bifurcated between opposing logics of security that position the logic of security as inherently pernicious (Copenhagen School, post-structuralism) or inherently progressive (Welsh School). In a sense, these ‘Schools’ correct the limits and tendencies of each other in important ways, suggesting (immanent) possibilities for a more nuanced understanding of the politics of security in the critical security studies project as a whole. Copenhagen School and post-structural theorists explore the logic of security that fol - lows from the dominant discourse of security in contemporary world politics, rightly cautioning against any assumed linkage between security and progress and pointing to the ways in which the promise of security can be used to justify illiberal practices. The Welsh School framework, meanwhile, recognizes that this dominant discourse of secu - rity does not necessarily capture the essence of security across time and space, in the process pointing to possibilities for progressive change in security dynamics and prac - tices. In a sense, these different approaches to the logic of security broadly reflect struc - tural and agential tendencies in International Relations more generally. We would argue that they suggest the need to take seriously the political limitations associated with domi - nant security discourses while recognizing and exploring the possibility for security to mean and do something different. A brief analysis of the different constitutive security logics underlying various secu - rity communities around the world provides ample evidence of the problems of univer - salizing claims about the politics of security. As Rumelili (2008) has noted, an instructive comparison can be drawn between the EU and ASEAN, in particular in terms of how these organizations’ conception of self-identity results in them relating themselves to otherness very differently. Propounding an inherently inclusive (i.e. democratic) identity and normative agenda, the EU is liable to locate otherness in an inferior position to itself, as something to transform and render acceptable/normal. Otherness is therefore something to be eradicated and to the extent to which it rejects transformation, it becomes destabilizing and potentially threatening. Such processes are, for example, clearly evident in the European Neighbourhood Policy (Browning and Pertti, 2008). In contrast, ASEAN operates with a largely exclusivist (i.e. civili - zational, geographic, ethnic) identity where norms of sovereignty and non-interfer - ence dominate. This, Rumelili suggests, facilitates more equitable relationships with otherness since the goal in such relationships is not one of conversion to the cause. In terms of the politics of security, what becomes evident here is how concepts of security and subjectivity are intimately connected to conceptions of identity and the limits of political community in different contexts. The second imperative for the future of the critical security studies project concerns the ethics of security. We advanced the claim that a shared concern with expanding the realm of dialogue underpins much of the critical security studies project, albeit to differ - ent degrees and in different ways. But to the extent that an ethics of security — a concep - tion of the good or progress regarding security — orients around a concern with such a position, this commitment needs to be acknowledged and defended. A range of pressing questions suggest themselves here, including the bases for prioritizing open dialogue; the relationship between spheres of deliberation and material conditions of existence; the at University of Kansas Libraries on February 25, 2016 ejt.sagepub.com Downloaded from 250 European Journal of International Relations 19(2) possibilities for and limitations to the establishment of open dialogue; and the broader relationship between dialogue and outcomes. Elaborating on these commitments would also entail engaging with the argument that movements towards greater dialogue could potentially encourage the desire to exclude power, identity, emotion and other central features of global politics (see Price, 2008). Where difficult questions emerge about this and other dimensions of an ‘ethical’ engagement with security — such as the role of violence in the Welsh School framework, for example (Peoples, 2011) — these need to be confronted. If there is a consistency across critical security studies scholarship in this sense, it is that ethical commitments are evident (in commitments to resistance, desecuritization or emancipation, for example) but are insufficiently developed to provide a genuine account of what constitutes ethical action regarding security. Indeed, immanent possibilities for the development of the criti - cal security studies project arise from these (often implied) commitments that need draw - ing out and examining in the context of difficult dilemmas in world politics. This process of drawing out ethical commitments should be viewed as a reflexive movement towards recognizing the assumptions and potential implications of one’s own theorizing, a posi - tion central to both broader definitions of Critical Theory (see Cox, 1981) and to the compelling critique of traditional security studies as insufficiently engaged with the eth - ics and effects of its own theorizing about world politics. And it needs also to be matched up with the preceding understanding of the politics of security. Is the expansion of delib - eration and movement away from violence, for example, always progressive, and does it require the rejection of security as a political category or its reform? The example of Australian debates around the arrival by boat of asylum-seekers in 2010 illustrates tensions and ambiguities at work regarding the ethics of security, particu - larly as understood in key critical approaches to the study of security. In that context, Labor Prime Minister Julia Gillard’s call for ‘a frank, open, honest national conversation’ about asylum and border security particularly encouraged the articulation of negative and exclusionary views of asylum-seekers, paradoxically rendering the (re)securitization of asylum in the Australian context more likely (see McDonald, 2011). Particularly strik - ing here was the Prime Minister’s suggestion that this national conversation should take place outside the limits imposed by political correctness that would otherwise discourage the articulation of right-wing or racist sentiments towards asylum-seekers. In this exam - ple, the apparent opening of dialogic space encouraged by the Prime Minister was inti - mately related to the movement towards exclusionary security logics and practices orienting around the imperatives of ‘border security’. The point of this example is not to illustrate the limits of open dialogue per se, but rather to illustrate two broader claims regarding the relationship between security and ethics in the critical security studies project that we make here. First, while normative preferences are evident, these are often insufficiently developed or robust to enable the ethical adjudication between different practices or outcomes. The normative preference for deliberation evident in the commitment to desecuritization, for example, is not suf - ficiently robust to enable us to engage with difficult questions concerning the forms of deliberation that should be encouraged or even the circumstances in which ‘hate speech’, for example, might be curtailed (on this, see Gelber, 2010). Second, and to return to the central argument of the article, the Australian example reminds us of the need to explore the implications of security conceptions and practices in particular contexts, rather than at University of Kansas Libraries on February 25, 2016 ejt.sagepub.com Downloaded from Browning and McDonald 251 assume that a particular security logic will inhere — or outcomes will follow — from the use of the term ‘security’ or a stated political commitment to ‘dialogue’. The core challenge for the critical security studies project is ultimately moving beyond critique and agenda-setting and towards a contextual analysis of security dynamics and practices in global politics. There is no question that a focus on the politics of security and the ethics of security are crucial intellectual endeavours too readily elided or ignored in traditional approaches to the study of security. For this reason alone we need a ‘criti - cal security studies project’. However, universalizing claims concerning the politics of security — found in the securitization framework and much post-structural engagement with security — must ultimately give way to nuanced analyses of the ways in which security is constructed and challenged in particular social, historical and political con - texts. A range of theorists have — in different ways — sought to engage with precisely this question, illustrating the various ways in which security dynamics ‘play out’ in dif - ferent settings in terms of constructing community (e.g. Bubandt, 2005), challenging identity binaries (e.g. Avant, 2007) or enabling space for different forms of political response (e.g. Doty, 1998/9). Yet these insights ultimately remain marginal to key ‘Schools’ and conceptual frameworks of security, and are too often forgotten in our search for the universal in a complex world. Beyond the development of nuance in our understanding of the ‘politics of security’, the critical security studies project urgently needs to move beyond normative ‘leaps of faith’ concerning the ethics of security. This particularly applies to the Copenhagen and Welsh School preference for dialogue as a progressive means of escaping exclusive and illiberal security logics and practices. While genuinely open dialogue regarding the construction of security and threat has much to recommend it, crucial here is the need for advocates to reflect upon and lay bare the bases upon which these claims are made in philosophical terms, and to reflexively examine the implications of alternative security conceptions and practices in analytical terms rather than assume particular dynamics to be progressive. This too suggests the need to move towards a focus on the particular social, historical and politi - cal contexts in which security is constructed and practised in global politics.