### Part 1 is Framing

#### The meta-ethic is consistency with existential will of volitions – prefer:

#### [A] Proceduralism – the will is the mechanism by which every agent engages in any activity, which means regardless of the content of any ethical theory, the ability to will that theory is an intrinsic good

#### [B] Motivation – the structure of the will is the primary source of all our desires, reasons, and beliefs since it generates what counts as motivational to the subject

#### [C] Identity – the nature of the will is most constitutive to the creation of the subject since it determines what each subject considers intrinsic to its identity and what exists externally as an façade.

#### And some desires are so deeply engrained that they are essential to our identity and we can’t even imagine living without them. We call these non-negotiable manifestation of desires - volitional necessities. The necessity of an authentic, free will is contained within the action of willing. When one wills, one posits that one ought to permit to will – this makes volition a pre-requisite.

Jaeggi 1 (14)[Rahel Jaeggi (August 2014). “Alienation.” Columbia University Press. Translated by Frederick Neuhouser and Alan E. Smith. Edited by Frederick Neuhouser. Rahel Jaeggi is professor of social and political philosophy at the Humboldt University in Berlin. Her research focuses on ethics, social philosophy, political philosophy, philosophical anthropology, social ontology, and critical theory]//los altos bf

On the one hand, self-alienation can be understood, with Frankfurt, as being “delivered over to” our own desires and longings. (We could call this “first order” alienation.) These desires can take on an overwhelming power that presents itself as a “force alien to ourselves.” This is not due to their irresistible character alone: “It is because we do not identify ourselves with them and do not want them to move us.”29 2. These feelings and passions are the raw material that we relate to evaluatively or with respect to which we form our will. Whether a person identifies himself with these passions, or whether they occur as alien forces that remain outside the boundaries of his volitional identity, depends upon what [they themselves] he himself wants his [their] will to be.30 Hence the volitional attitudes on this level, in contrast to unformed first- order desires, can be shaped and structured and are wholly at our command: they are “entirely up to” us. A crucial implication of this account is the distinction between power and authority. Passions, according to this account, have volitional power but no volitional authority. Frankfurt elaborates: “In fact, the passions do not really make any claims on us at all. . . . Their effectiveness in moving us is entirely a matter of sheer brute force.”31 3. What we do not freely have at our command, in contrast, is our volitional nature, the deep structure of our will itself. On the level of volitional necessities we are determined; here it is not “entirely up to us” how we determine our will; our volitional nature determines us. Yet our volitional necessities [and] determine us in a different sense from that in which passions or first-order desires do: they compel us, one could say, not as alien powers but rather to be ourselves. They are not a brute force because they are not an external power but rather the power of what we really want or really are. “It is an element of his established volitional nature and hence of his identity as a person.”32 For this reason Frankfurt can claim in his adoption example that the mother experiences the limitation of her will—her “not being able to”—as a kind of liberation. Self-alienation, then, means acting against one’s volitional nature. Hence the mother who wants to give up her child has formed a second order volition that conflicts with her volitional nature. If she acted in accordance with this second order volition, she would alienate herself—a “second order” alienation. This means that it would run counter to what constitutes her as a person; it would undermine the conditions of her identity. Self-alienation on this level consists, then, in not being in agreement with one’s own person, with what constitutes oneself as a person. The assumption of a volitional nature appears, then, to solve the problem of finding a criterion for authentic desires and their authorization that I have raised in conjunction with the theme of self-alienation. The standard for the appropriateness or inappropriateness of identifying with a desire is our volitional nature; our desires—our real desires—are authorized in relation to it. In what follows, however, I will explain why this, too, fails to solve the problem raised in our initial example.]]

#### And, when agents are denied the ability to act upon their volition necessities, they are alienated. Alienation denies one’s identity and relations with others, which restrains their ability to shape who they want to be as desires are no longer a part of their will.

Jaeggi 2 **(14)** [Rahel Jaeggi (August 2014). “Alienation.” Columbia University Press. Translated by Frederick Neuhouser and Alan E. Smith. Edited by Frederick Neuhouser. Rahel Jaeggi is professor of social and political philosophy at the Humboldt University in Berlin. Her research focuses on ethics, social philosophy, political philosophy, philosophical anthropology, social ontology, and critical theory] //los altos bf

THE CONCEPT OF ALIENATION REFERS to an entire bundle of intertwined topics. Alienation means indifference and internal division, but also powerlessness and relationlessness with respect to oneself and to a world experienced as indifferent and alien. Alienation is the inability to establish a relation to other human beings, to things, to social institutions and thereby also—so the fundamental intuition of the theory of alienation—to oneself. An alienated world presents itself to individuals as insignificant and meaningless, as rigidified or impoverished, as a world that is not one’s own, which is to say, a world in which one is not “at home” and over which one can have no influence. The alienated subject becomes a stranger to itself; it no longer experiences itself as an “actively effective subject” but a “passive object” at the mercy of unknown forces.1 One can speak of alienation “wherever individuals do not find themselves in their own actions” 2 or wherever we cannot be master over the being that we ourselves are (as Heidegger might have put it). The alienated person, according to the early Alasdair MacIntyre, is “a stranger in the world that he himself has made.” 3

#### Thus, the standard is resisting alienation. The standard is means based since ethics shouldn’t be concerned with states of affairs that appropriation leads to but whether the act of appropriation is relevant to the self. Alienation isn’t the same as oppression; it is not only the literal denial of freedom, but also the failure to realize that freedom and relation to the world. Also means that alienation is the worst impact under any framework, so winning the offense is sufficient to affirm.

#### Prefer additionally:

#### [1] Rule Following Paradox: Rules can’t secure their own application – applying a rule to new situation is indeterminate. If I see a sequence 1+1, I might think the answer is 2, but that appeals to the higher rule of addition, which appeals to mathematics, and so on which leads to infinite regress.

#### Our framework is the only one that solves, because a) appropriating volitional necessities in resistance to alienation defines for myself what it means for us to follow higher-order rules and choose which rules to follow. That’s k2 resolvability because otherwise frameworks would be infinitely regressive. Double bind – either a) you use your framing which is irresolvable so you presume to avoid regress or b) you use our framing and affirm.

#### [2] Bindingness: Only the theory of alienation is inescapable because to deny the framework requires synthesizing the world such that you view yourself as an agent; being alienated prevents you from denying the framework. Ethics must be binding because bindingness is what makes ethical theories internally motivating and produces moral action from the agent, otherwise you presume.

### Part 2 is the Plan

#### Plan - Member nations of the World Trade Organization ought to reduce intellectual property protections for COVID-19 medicines. Spec below – I’ll spec anything else in cx.

#### The plan waives vaccine IPR to LMICs – that’s effective and solves vaccine inequality.

Erfani et al 8/3 (Parsa Erfani, Fogarty global health scholar1 2, Agnes Binagwaho, vice chancellor2, Mohamed Juldeh Jalloh, vice president3, Muhammad Yunus, chair4, Paul Farmer, professor57, Vanessa Kerry, associate professor810 Harvard Medical School, Boston, USA 2University of Global Health Equity, Rwanda 3Sierra Leone 4Yunus Centre, Bangladesh 5Global Health and Social Medicine, Harvard Medical School, Boston, USA 6Division of Global Health Equity, Brigham and Women’s Hospital, USA 7Partners In Health, USA 8Seed Global Health, USA 9Program in Global Public Policy and Social Change, Harvard Medical School, Boston, USA 10Division of Pulmonary and Critical Care Medicine, Massachusetts General Hospital, USA Intellectual property waiver for covid-19 vaccines will advance global health equity BMJ 2021; 374 doi: https://doi.org/10.1136/bmj.n1837 (Published 03 August 2021) Cite this as: BMJ 2021;374:n1837 https://www.bmj.com/content/374/bmj.n1837.full) rc//los altos bf

The barrier to adequate vaccine supply today is not lack of vaccine options, nor even theoretical production capacity; the problem is the intellectual property (IP) protection governing production and access to vaccines—and ultimately, the political and moral will to waive these protections in a time of global crisis. Without such liberty, there will not be enough vaccine fast enough to prevent the spread of variants, the avoidable deaths, and the continued choking of low and middle income countries (LMICs) through poor health. Beyond donor based models of global vaccine equity As covid-19 became a pandemic, global efforts emerged to help ensure vaccines would be delivered across the globe to the highest risk populations. One of the first was Covax, a risk sharing mechanism in which countries, tiered by means, contribute to collectively source and equitably distribute vaccines globally. The effort, however laudable in intent, has been undercut by vaccine scarcity and underfunding. Covax aims to vaccinate 20% of the population in 92 low and middle income countries by the end of 2021. At the end of April, however, it had shipped only one fifth of its projected estimates and lacked critical resources for distribution.3 LMICs are wary about participating in well worn dynamics of global health aid. Instead, they are mobilising to overcome the fundamental paucity of available vaccines by challenging established global IP rules. At issue is the 1995 Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which established minimum protection standards for IP—including patents, industrial designs, trade secrets, and copyright—that all 164 members of the World Trade Organization (WTO) must respect.5 Subsequent rulings (such as the Doha declaration) have strived to clarify safeguards on patents, including compulsory licensing, which allows governments to license patents to a third party without consent (table 1).6 Today, these rules provide strong IP protection for vaccine technologies and affect the quantity and location of vaccine production and availability. Table 1 Licensing of intellectual property View popupView inline In October 2020, South Africa and India submitted a proposal to the WTO to temporarily waive certain provisions of the TRIPS agreement for covid-19 health products and technologies. The waiver would prevent companies that hold the IP for covid-19 vaccines from blocking vaccine production elsewhere on the grounds of IP and allow countries to produce covid-19 medical goods locally and import or export them expeditiously (table 1). Although the proposed IP waiver is supported by over 100 countries, WTO has not reached a consensus on the proposal because of opposition and filibustering by several high income countries, including the UK, Germany, and Japan.7 Waiver opponents argue that the limited capacity of LMICs to produce complex covid-19 vaccines safely is the true barrier to global production, not IP. They suggest that the TRIPS waiver would penalise drug companies, stifle biomedical innovation, and deter future investments in research and development—in sum, that it would reduce returns on investment and dismantle an IP system that provided the goods needed to end the pandemic. Others are concerned that an IP waiver would fuel supply chain bottlenecks for raw materials and undermine ongoing production. Moreover, policy makers argue that a waiver is unnecessary as company driven voluntary licensing—in which companies decide when and how to license their technologies—and existing TRIPS flexibilities (such as country determined compulsory licensing) should suffice in establishing production in LMICs (table 1). They suggest that waiving IP for covid-19 vaccines would provide no meaningful progress, but the data do not support this. What effect would a waiver have? Contrary to detractors’ concerns about the possible effect of a temporary TRIPS waiver, global health analyses suggest that it will be vital to equitable and effective action against covid-19. LMIC’s manufacturing capabilities have been underestimated, even though several LMICs have the scientific and manufacturing capacity to produce complex covid-19 vaccines. India, Egypt, and Thailand are already manufacturing viral vector or mRNA-based covid-19 vaccines,8910 and vaccine production lines could be established within months in some other LMICs,11 offering substantial benefit in a pandemic that will last years.11 Companies in India and China have already developed complex pneumococcal and hepatitis B recombinant vaccines, challenging existing vaccine monopolies.12 The World Health Organization launched an mRNA technology transfer hub in April 2021 to provide the logistical, training, and know-how support needed for manufacturers in LMICs to repurpose or expand existing manufacturing capacity to produce covid-19 vaccines and to help navigate accessing IP rights for the technology.13 Twenty five respondents from LMICs expressed interest, and South Africa was selected as the first hub, with plans to start producing the vaccine through the Biovac Institute in the coming months.14 Removing IP barriers through the waiver will facilitate these efforts, more rapidly enable future hubs, engage a greater number of manufacturers, and ultimately yield more doses faster. Moreover, as the waiver facilitates vaccine production, demand for raw materials and active ingredients will increase. Coupled with pre-emptive planning to anticipate and expand raw material production, the waiver—which encompasses the IP of all covid-19 vaccine-related technology— can offer a path to overcome bottlenecks and expand production of necessary vaccine materials. Current licensing mechanisms inadequate Voluntary licences have not and will not keep pace with public health demand. Since companies determine the terms of voluntary licences, they are often granted to LMICs that can afford them, leaving out poorer regions.10 For example, in South Asia, AstraZeneca has voluntarily licensed its vaccine to the Serum Institute of India, even though the region has multiple capable vaccine manufacturers.9 Many covid-19 vaccine developers have not taken steps towards licensing their technologies, simply because there is limited financial incentive to do so.11 To date, none have shared IP protected vaccine information with the WHO Covid-19 Technology Access Pool (C-TAP) established last year.15 Relying on the moral compass of companies that answer to shareholders to voluntarily license their technologies will have limited effect on vaccine equity. Their market is driven by profit margins, not public health. Compulsory licensing by LMICs will also be insufficient in rapidly expanding vaccine production, as each patent licence must be negotiated separately by each country and for each product based on its own merit. From 1995 to 2016, 108 compulsory licences were attempted and only 53 were approved.6 The case-by-case approach is slow and not suitable for a global crisis that requires swift action. In addition, TRIPS requires compulsory licences to be used predominantly for domestic supply, limiting exports of the licensed goods to nearby low income countries without production capacity.5 Although a “special” compulsory licence system was agreed in the Doha declaration to allow for expeditious exportation and importation (formalised as the article 31bis amendment to TRIPS in 2017), the provision is limited by cumbersome logistical procedures and has been rarely used.16 Governments may also be hesitant to pursue compulsory licences as high income countries have previously bullied them for doing so. Since India first used compulsory licensing for sorafenib tosylate in 2012 (reducing the cancer drug’s price by 97%), the US has consistently pressured the country not to use further compulsory licences.17 During this pandemic, Gilead sued the Russian government for issuing a compulsory licence for remdesivir.18 Furthermore, while compulsory licences are primarily for patents, covid-19 vaccines often have other types of IP, including trade secrets, that are integral for production.19 The emergency TRIPS waiver removes all IP as a barrier to starting production (not just patents) and negates the prolonged time, inconsistency, frequent failure, and political pressure that accompany voluntary licensing and compulsory licensing efforts. It also provides an expeditious path for new suppliers to import and export vaccines to countries in need without bureaucratic limitations. Finally, there is no compelling evidence that the proposed TRIPS waiver would dismantle the IP system and its innovation incentives. The waiver is restricted to covid-19 related goods and is time limited, helping to protect future innovation. It would, however, reduce profit margins on current covid-19 vaccines. With substantial earnings in the first quarter of 2021, many drug companies have already recouped their research and development costs for covid-19 vaccines.20 However, they have not been the sole investors in vaccine development, and they should not be the only ones to profit. Most vaccines received a substantial portion of their direct funding from governments and not-for-profit organisations—and for some, such as Moderna and Novavax, nearly all.21 Decades of publicly funded research have laid the groundwork for current innovations in the background technologies used for vaccines.22 Given that companies were granted upfront risk protection for covid-19 vaccine research and development, a waiver that advances global public health but reduces vaccine profits in a global crisis is reasonable. Knowledge transfer An IP waiver for covid-19 vaccines is integral to boosting vaccine supply, breaking vaccine monopolies, and making vaccines more affordable in LMICs. It is, however, only a first, but necessary, step. Originator companies must transfer vaccine technology and share know-how with C-TAP, transfer hubs, or individual manufacturers to help suppliers begin production.23 In addition, governments must leverage domestic law, private sector incentives, and contract terms with pharmaceutical companies to compel companies to cooperate with such transfers.24 If necessary, governments can require technology transfers in exchange for continuing enterprise in a country or avoiding penalties. Politicians and leaders are at a critical juncture: they will either take the necessary steps to make vaccine technology available to scale production, stimulate global collaboration, and create a path to equity or they will protect a hierarchical system based on an economic bottom line. The former will not only build a vaccination trajectory that puts equal value on the lives of the rich and the poor, but will also help stem the pandemic’s relentless momentum and quell the emergence of variants. We are in the middle of one of the largest vaccination efforts in human history. We cannot rely on companies to thread the needle of corporate social and moral responsibility with shareholder and stock value returns nor expect impacted governments to endure lengthy bureaucratic licensing processes in this time of crisis. It will be a legacy of apathy and unnecessary death. As the human impact of the proposed IP waiver becomes clear, consensus behind it is growing. Countries that previously opposed the waiver—such as the US and Brazil—now support written text based negotiations.7 Opposing countries must stop blocking the waiver, engage in transparent text negotiations, and commit to reaching consensus swiftly. The longer states stall, the more people die needlessly. Covid-19 has repeatedly shown that people without access to resources such as strong health systems, health workers, medicines, and vaccines will preferentially fall ill and die. For too long, this cycle has been “other people’s” problem. It is not. It is our problem.

### Part 3 is the Offense

#### The plan solves for conditions of alienation:

#### [1] Only a principle of bodily rights which accounts for inalienable ownerships and medical distribution can avoid alienation.

Björkman and Hansson ‘06 (Beyza, Sven Ove. Bodily rights and property rights. J Med Ethics. 2006 Apr;32(4):209-14. Philosophy Unit, Royal Institute of Technology, Stockholm, Sweden. pp. 209-214. doi: 10.1136/jme.2004.011270. )//los altos bf – ask me for the pdf !

For the purposes of bioethical analysis it is particularly unfortunate that the natural rights account of property is an all or nothing theory with respect to the contents of property rights. Although the theory provides criteria to determine whether a certain person owns a particular object, it lacks the power to determine the exact nature of the property right in question. Property in biological material can take very different forms, from patents and other forms of intellectual property to traditional ownership of material objects. We therefore need an account of property that is better equipped than traditional natural rights theory to provide guidance about the appropriate form of property rights.

Such an account has been developed in the utilitarian tradition. According to Jeremy Bentham, ‘‘there is no natural property’’. To the contrary: ‘‘Property and law are born and must die together. Before the laws, there was no property; take away law, all property ceases’’.27 Similarly, Henry Sidgwick treated the choice of proper rules for property as a matter of ‘‘expediency’’ to be determined by a balancing of different considerations.28

In a famous essay, Felix Cohen (1907–1953) further developed this approach to property.25 On his view, property rights have their origin in the law, and historically laws express the interests of those who write and promulgate them. Ethically, on the other hand, the merits of any law or legal arrangement should be judged according to how well it promotes the good life of those affected by it. Therefore, property rights should be arranged such that they promote a proper combination of social goals such as justice and economic productivity.

One of Cohen’s examples is the ownership of newborn livestock. Already the Laws of Manu, supposedly the oldest legal code in the world, stipulated that a newborn mule belongs to the owner of the mare. Perhaps a good argument could be made that the owner of the stud ought to have a share in the offspring, but legal systems have been consistent in granting no such rights. According to Cohen, this is best understood in terms of social expediency; since the identity of the mother is seldom in doubt the chosen solution is best suited to avoid disruptive social and legal feuds.

We choose to call this view a social constructivist view of ownership since it stipulates that ownership is the result of a series of social choices and events that could well have been different. (The social constructivist theory of ownership should not be confused with other theories that treat natural phenomena as social constructions.29)

According to this view, society is free to choose the system of property rights that best promotes social goods, such as justice and economic productivity. One of the chief tasks of government is to issue laws that create and define such a system or rights. Property rights, taken in this sense, cannot exist independently of (some form of) government.

The social constructivist view stands in contrast to the natural rights theory of ownership, according to which ownership is based on rules that are independent of social choices and conventions. Natural rights theorists tend to think of property as a relation between the owner and the owned object. Cohen pointed out that for a detailed analysis of property rights, it is more useful to see those rights as sets (bundles) of legal relations between the owner and the non- owners of an object. A person’s ownership of a piece of land includes rights that entitle her to exclude others from entering the land, rights to charge them for doing so, rights to sell the land, and so forth.25 The rights and obligations that make up the bundle may vary depending on the nature of the object in question. In some cases there is more than one bundle of rights relating to one and the same object, such as a mining concession and land ownership with respect to one and the same piece of land. This feature of his approach is highly applicable to bioethics. It can help explain why, for instance, both the patient from whom a cell line was taken and the researchers who refined it seem to have (different types of) ownership rights to that cell line.

2. COMPONENTS OF BUNDLES OF RIGHTS

Several proponents of the social constructivist theory of ownership have provided systematic accounts of the compo- nents of the bundles of rights that constitute ownership. To the best of our knowledge, the first such proposal was put forward by Henry Sidgwick in his Elements of Politics (1891). Sidgwick’s three components of ownership were: the right of exclusive use, the right to destroy, and the right to alienate— for example, by means of donation, exchange, or barter. Notably, however, he argued that the right to bequeath should not be included among the rights that define the notions property.28

Today, Sidgwick’s analysis is rarely referred to. The most influential dimensional analysis is instead Tony Honore ́’s list of eleven types of legal relations that he considers to be the major components of the full liberal type of ownership manifesting itself in modern capitalism.30

1. The right to possess—namely ‘‘to have exclusive physical control of a thing, or to have such control as the nature of the thing admits’’.

2. The right to use—that is, ‘‘the owner’s personal use and enjoyment of the thing owned’’.

3. The right to manage—that is, to ‘‘decide how and by whom the thing owned shall be used’’.

4. The right to income—that is, to reap the benefits from ‘‘foregoing the personal use of a thing and allowing others to use it for reward’’.

5. The right to the capital—that is, ‘‘the power to alienate the thing, and the liberty to consume, waste, or destroy the whole or part of it’’. This includes the power to transfer the holder’s title to the object.

6. The right to security—meaning that the owner ‘‘should be able to look forward to remaining owner indefinitely if he so chooses and if he remains solvent’’. An exception is made for the power of the state to expropriate against adequate compensation.

7. The incident of transmissibility—meaning that ‘‘the interest can be transmitted to the holder’s successors, and so on ad infinitum’’.

8. The incident of absence of term—meaning that ownership does not cease to be valid ‘‘at a future date or on the occurrence of a future event which is itself certain to occur’’.

9. The duty to prevent harm—meaning that the owner’s liberty to use and manage the thing owned as he chooses is ‘‘subject to the condition that not only may he not use it to harm others, but he must prevent others from using the thing to harm other members of society’’.

10. Liability to execution—meaning that the owned thing can be ‘‘taken away from him for debt, either by execution for a judgment debt or insolvency’’.

11. Residuary character—meaning that ‘‘either immediately or ultimately, the extinction of other interests would inure to [the owner’s] benefit’’.30

Several scholars have proposed modifications of Honore ́’s analysis, or alternatives to it. Lawrence C Becker extended Honore ́’s list into one with thirteen instead of eleven components.31 The most important difference is that he divided Honore ́’s fifth component, the right to the capital, into four parts. One of these is the right (power) to transmit, which he combined with Honore ́’s seventh component. The other three are the right (liberty) to consume or destroy the object in question, the right (liberty) to modify it, and finally the right (power) to alienate it through donation, exchange, or abandonment.31

Most of the alternatives to Honore ́’s proposal that we are aware of differ from Becker’s in reducing rather than increasing the number of components of property. A list of six components has been proposed by Frank Snare.32 Both Peter Karlen and Robert Goodin have put forward shorts lists containing only three components.33 34 The different accounts of the components of ownership, according to the authors mentioned, are summarised in table 1. It is interesting to note that Honore ́, Becker, and Snare differ from the other three in including components that are negative for the owner, such as liability to execution, a duty to prevent harm, and an obligation to compensate for damages.

When it comes to biological material, some of the categories mentioned in table 1 are hardly relevant. This applies for instance to ‘‘liability to execution’’. Other categories need further elaboration and to some extent subdivision in order to cover the issues at hand. In particular, the distinction between removal of an organ before and after the person’s death has to be included, and the distinction between donating and selling needs to be made explicit since it is more important for biological material than for most other objects to which one can have rights. In table 2 we propose a categorisation of major components of bundles of rights to biological materials, indicating how they correspond to the more general typologies proposed by Honore ́ and Becker. This table is intended to provide the basis for a detailed discussion of what rights a person should have to some biological material. Its focus is on the rights that are relevant to the alienation of biological material; hence other rights relating to a person’s body—such as rights to health care—are not included. (If they were, then it is likely that more elements from table 1 would have counterparts in table 2.)

3. BUNDLES OF RIGHTS

Most cases of property rights in modern societies do not include all the types of relations presented in table 1. There are also bundles of rights, such as a tenant’s rights with respect to a rented flat, which contain some of the elements of ownership but yet do not suffice for (full) ownership. One problem for the constructivist approach is that it may have difficulties in determining which bundles constitute owner- ship. Honore ́’s approach to this problem was to apply Wittgenstein’s notion of family likeness. On this view, there is no single criterion or combination of criteria that have to be met in order for ownership to be present. ‘‘[T]he listed incidents [the 11 components], though they may be together sufficient, are not individually necessary conditions for the person of inherence to be designated the owner of a particular thing.’’30

**[Table Omitted]**

In our view, although the family likeness approach may be adequate in crosscultural studies of property rights, it does not seem to be a specific enough tool for analysing ownership in modern capitalist societies. For the latter purpose, it appears to be more in line with actual linguistic usage to consider a person’s right to sell an entity as the core feature of ownership of that entity. In the vast majority of cases, we are considered to ‘‘own’’ those (material and immaterial) objects that we are allowed to sell, but only rarely is a bundle of rights that does not confer a permission to sell considered to constitute ownership of the entity in question.

In modern society there exist a vast number of transferable rights to different types of entities. Instead of creating a complete set of legal regulations anew for each of these types of rights, they are all subsumed under the unifying institution of property. This is done by the construction of legal entities, such as shares, options, patents, and copy- rights, which can be owned and traded. Different bundles of rights to material objects are created by constructing various types of immaterial objects, which are all combined with the same system of ownership. This practice was hinted at by Honore ́ when noting that ‘‘when the legislature or courts think that an interest should be alienable or transmittable, they reify it and say that it can be owned’’.30

**[Table Omitted]**

Of course, not all rights in modern societies are property rights. Another important category is the inalienable (simple) rights that are legally impossible to part. The right that one has to one’s own life and person is a prime example; we cannot legally sell ourselves as slaves. The right to vote is another inalienable right, and so are the basic human rights.

Turning to biological material, there is a long tradition of treating the rights that one has to one’s bodily parts as inalienable. Immanuel Kant maintained that ‘‘a man is not entitled to sell his limbs for money, not even if he were to get 10,000 thalers for one finger for otherwise all the man’s limbs might be sold off’’.35 Generally speaking, legal systems do not honour agreements to part with bodily parts against remuneration—that is, the law does not give us full property rights to our organs. The reason for this seems to be that the lawgiver wishes to protect us against loss of organs in much the same way as we are protected from becoming slaves by a legal system that does not honour a voluntary agreement to enter slavery. The inappropriateness of traditional (full) property rights to bodily parts was also emphasised by Honore ́, who wrote:

‘‘In other cases again, we speak not of having a thing but a right in or to something. Thus, a person does not either own or have his body or liberty, though perhaps he owns dead parts of his body such as his hair and nails. In general he has, instead, a right to bodily security or liberty, and a right to determine how parts of his body, such as his kidneys, are to be used during his lifetime if he chooses to forego their use or, being dead, no longer has use for them. Here the analogy with the ownership of a thing is tenuous. These rights are either inalienable or can be dealt with only by something in the nature of a gift.’’30

As was indicated in the last quoted sentence, due to transplantation surgery healthy organs can now be parted with for much better reason than in Kant’s time. As a consequence of this, a third type of rights bundle has emerged in modern legal systems, which is distinguishable both from full property rights and from inalienable rights: a person can have a right to give up an organ by donation or bequest, but still not be allowed to sell it. This is the type of right that most modern jurisdictions assign to us with respect to our kidneys. We propose to call this type of rights bundle non-tradable rights. Logically speaking, inalienable rights are non-tradable. For terminological convenience, however, we use the term ‘‘non-tradable’’ to denote the situation where donation but not selling is allowed.

An important lesson to be drawn from this is that the issue of property rights to biological material should not be reduced to a simple binary issue of owning or not owning. A person’s legal rights with respect to a biological material (from her own body or that of someone else) can be constructed in many different ways, depending on what types of legal relations are included in the bundle. The primary normative issue is what such a bundle of rights should contain. It is only a secondary issue whether the chosen bundle of rights should be called a property right.

Discussions of this secondary issue are complicated by terminological ambiguities. The words ‘‘own’’ and ‘‘owner- ship’’ are often used to denote not only (full) property rights but also some (but not all) of the inalienable and non- tradable rights. It is common to say that a person ‘‘owns’’ her body (but not that she ‘‘owns’’ her freedom of expression or her right to vote). This is an established usage of the word that cannot easily be eliminated. In a scholarly context, however, it is important to distinguish between on the one hand usages of ‘‘own’’ that refer to full property rights that include a right to sell and on the other hand usages of the same word that refer to inalienable or non-tradable rights.

4. FIVE PRINCIPLES OF BODILY RIGHTS

Equipped with the distinctions introduced in the previous sections, we can now turn to the normative task of developing principles for what kind of ownership or other rights a person should have to parts of her own body. We will do this by proposing five moral principles of bodily rights. By a bodily right we mean a right that regulates a person’s privileges with respect to her own body. A bodily right may, but need not, give rise to a property right. Therefore, none of the five principles mentions ownership or property. The procedure that we propose is that for each type of biological material under consideration, the five principles of bodily rights be used to guide a decision on which of the components listed in table 2 should be included in an appropriate bundle of rights for the type of material in question. Only after this has been done can it be determined whether the bundle is classifiable as a property right or as another type of right, such as an inalienable or non-tradable right.

The first principle of bodily rights expresses the indivi- dual’s sovereignty with respect to her own body. We can express it as follows:

The first principle of bodily rights

No material may be taken from a person’s body without that person’s informed consent.

This is a very general principle. It has exceptions in certain applications, such as the treatment of patients unable to give informed consent, and blood testing for forensic purposes. Since these exceptions are peripheral for the purposes of the present paper, we will not give an account of them here. In the terms of table 2, this principle amounts to saying that components 1 (right to security in life) and 2 (right to security after death) should normally be included in the bundle of rights that a person has with respect to parts of her own body. In combination, these two components stipulate that no human being can be justly deprived of a part of her body without her explicit consent, neither in life nor in death.

The informed consent referred to in the first principle should specify the intended usage of the material. As the experience with biobanks shows us, however, it is no trivial matter to determine how precise that specification has to be. A general specification such as ‘‘for future medical research’’ may not be sufficient.36

Given general principles of medical ethics, the second principle of bodily rights is fundamental and self evident. It is included for completeness.

The second principle of bodily rights

Under conditions of informed consent, removal of bodily material is allowed as a means to obtain significant therapeutic advantages for the person herself.

Our third principle brings us to the more difficult cases, namely the removal of biological material from one person in order to obtain advantages for somebody else. Transplantation of organs from living donors has saved thousands of lives, and blood transfusions probably many more. A reasonable normative framework of bodily rights should facilitate these practices, and the same applies to other practices under development that may be therapeuti- cally useful while imposing at most very small risks on the persons from whom the material originates. Just as in current practice (and in accordance with our first principle), informed consent should be a prerequisite for any such procedure.

The third principle of bodily rights

Under conditions of informed consent, removal of bodily material is allowed as a means to obtain significant therapeutic advantages for one or more other persons, provided that the removal does not cause serious or disproportionate harm to the person from whom the material is taken.

For practical purposes, this principle can be taken to imply the inclusion of components 3 (right to donate for removal in life) and 4 (right to donate for posthumous removal). The clause about ‘‘serious or disproportionate harm to the person from whom the material is taken’’ is relevant also for the latter component, since psychological harm may result from a person’s awareness that she will not be buried intact in the way required by her religion. The third principle is compatible with components 5 (right to sell for removal in life) and 6 (right to sell for posthumous removal), but does not imply either of these.

Trading on a market is known to be an efficient means of distributing commodities to people who need them. Therefore, a general prohibition against selling biological material may be unnecessary and even counterproductive. An alternative approach that needs to be considered is to allow

trade in at least some types of biological materials but prohibit exploitative practices. A major problem with this proposal is its practicability. Even if there is a non- exploitative sale of a kidney, it may in practice be impossible for legal institutions to distinguish it from exploitative sales.

For concreteness, consider a somewhat different example that we have chosen since it makes the coexistence of exploitative and non-exploitative commerce in the same material plausible. A famous artist has decided to create a sculpture made entirely out of human earlobes and receipts showing that they have been bought at ten dollars a piece. Before she can create this masterpiece she has to decide how to obtain the raw material. There are two options: she can either buy the earlobes from the desperately poor, or she can acquire them from rich art collectors who want to sell their earlobes at this nominal price in order to be immortalised. Clearly, the former option is more exploitative than the latter one. A consistent legal system cannot, however, be so constructed that the earlobe of one person is tradable but not that of another. If mutilation for artistic purposes becomes a social problem in need of regulation (which is not inconceivable, given some current developments in the visual arts—for example, Gunther von Hagen’s exhibition K ̈orperwelten http://www.bodyworlds.com/en/pages/home.- asp) legislators will have to consider laws that prohibit exploitation for such purposes in the same way as exploita- tive procurement of organs for transplantation is prohibited. We arrive at the following principle.

The fourth principle of bodily rights

If there is a significant risk that a certain practice in dealing with a biological material will result in exploitation of human beings, then that practice should either be disallowed or modified so that the exploitation is brought to an end.

This principle provides an empirical criterion for whether components 5 (right to sell for removal in life) and 6 (right to sell for posthumous removal) should be included in the bundle of rights that individuals have with respect to a particular type of material from their bodies. In the application of this criterion it is important to pay attention to the social conditions under which trade in biological material takes place. As we noted above, the risk for exploitation may not be the same for a full market and for a restricted market where buyer and seller are part of the same healthcare system, where prices are fixed, and the same type of queuing system for recipients is used as in the present donation based systems.

The fourth principle is also applicable to components 3 (right to donate for removal in life) and 4 (right to donate for posthumous removal), since donations may well be exploi- tative. It is no easy matter to turn down a close relative who asks for a kidney. According to this principle, systems for organ donation have to be arranged so that they leave potential donators with a real, autonomous choice.

Finally, the fourth principle has relevance also for component 7 (right to income). Economic offers to people who part with organs may be exploitative in much the same way as excessive payment to research subjects.

Our fifth and final principle of bodily rights applies to the fair distribution of medical resources that originate as parts of somebody’s body. Scarcity in medical resources gives rise to difficult distributional problems. These can be solved either by letting such resources be allocated outside of the market or by regulating the market in such way that justice in distribution is obtained. For medical resources that are not scarce, a market in human biological material does not seem to threaten the supply to patients (at least not in any other way than any market in medical supplies can). This can be summarised as follows.

The fifth principle of bodily rights

The system of legal rights should promote the efficient distribution of biological material for therapeutic purposes to patients according to their medical needs.

This principle has relevance for all seven components listed in table 2. It provides additional support for components 1 (right to security in life) and 2 (right to security after death), since any stable system of distribution has to provide security for people so that they know that their wishes will be respected. It provides support for components 3 (right to donate for removal in life) and 4 (right to donate for posthumous removal), on the assumption that any efficient distribution system contains donation either as the only way or at least as one of the ways in which human biological material can be obtained for therapeutical principles. It provides a criterion to be used in appraisals of components 5 (right to sell for removal in life), 6 (right to sell for posthumous removal), and 7 (right to income). Here, it is important to note that it is an empirical issue to what extent (and for what types of biological material) this principle supports trade in biological material.

In our view, the appropriate choice of a bundle of rights may differ for different types of biological material, for instance according to how scarce they are and how important they are for the health of the person from whom they are taken. It is, for instance, probable that the disadvantages of a market system will be smaller, and the advantages greater, for material that can be duplicated, such as stem cells and genetic material than for material such as complete organs, which cannot be duplicated. For the final analysis, ethical principles will have to be combined with empirical information about the actual consequences of different procurement and distribution procedures, both for the individuals from whom the biological material is taken and for those who depend for their health on the availability of such material.

#### [2] IP integrates modes of production into creative labor – that form of restriction alienates the subject from labor, establishing legal commodity to be controlled and manipulated.

Drahos ‘16, Peter. (2016) Original Pub November 1996, second edition June 2016. This edition © 2016 ANU eText. Print edition © 1996 Dartmouth Publishing Company. A Philosophy of Intellectual Property. Abstract Objects in Productive Life: Marx’s Story. pp. 129-133. Professor Peter Drahos is an Australian academic and researcher specializing in the areas of intellectual property and global business regulation amongst others. 10.4324/9781315263786. //los altos bf – ask me for the pdf !

The Tasks of Intellectual Property

We have argued that capitalism comes to depend on creative labour and that, as a result, it integrates such labour into its productive life. How is this done? This section argues that the integration is achieved through intellectual property law.

Marx begins Capital with an analysis of commodity. Capitalist wealth presents itself, Marx says, in the form of ‘an immense accumulation of commodities’.52 The emphasis on commodity is both a strength and a weakness in Marx’s overall analysis. Boss, in a perceptive analysis of Marx’s economic theory, argues that Marx uses a simple factory paradigm to model capitalist economic life.53 The preoccupation with showing factory workers to be the productive force in capitalism leads him into what she terms input–output error. This error occurs where some given labour or activity is thought to be both a necessary intermediate input and an unproductive superfluous output.54 Marx, Boss argues, commits an input–output error because in his economic universe the producer of commodities is genuinely productive while the provider of services is genuinely parasitic.55 One colourful example of the kind of error that Boss is talking about is to be found in Grundrisse. Marx there says, in relation to the service provided by a woodcutter, ‘this performance of a service cannot fall under the category of productive labour. From whore to pope, there is a mass of such rabble’.56 Marx’s analytical objection to classifying the woodcutter’s labour as productive is that the capitalist who acquires the service acquires only the use value of the service, a use value which is immediately consumed.57 There is for Marx nothing left to circulate in the economy: the exchange between the capitalist and the woodcutter produces no value.

Marx’s analysis of commodity is admittedly complex, for he is seeking to link it to the social relations of production while at the same time explaining the exchange values of commodities. But in some respects his concept of commodity is not so subtle. The problem lies in the fact that Marx is fixated by the materiality of production, with the consequence that the archetypal commodity within the Marxian economic framework is the material object. This preoccupation with material objects, as we have seen, sets limits on what he considers to be productive labour. It also leads him away from exploring the idea that, through law, capitalism engineers new commodity possibilities for itself. In order to support these claims, we need to quote a passage from Grundrisse:

Is it not crazy ... that the piano maker is a productive worker, but not the piano player, although obviously the piano would be absurd without the piano player? But this is exactly the case. The piano maker reproduces capital; the pianist only exchanges his labour for revenue. But doesn’t the pianist produce music and satisfy our musical ear, does he not even to a certain extent produce the latter? He does indeed: his labour produces something; but that does not make it productive labour in the economic sense; no more than the labour of the madman who produces delusions is productive.58

Marx’s example here is in one sense a contrast between the tangible and intangible. It reveals what is the strong tendency by Marx in both Grundrisse and Capital to think of productive labour as being linked to the production of material objects.

Earlier, in Chapter 2 it was argued that intellectual property relates to abstract objects and that one view of abstract objects is that they are convenient mental fictions. To say that they are convenient is to understate their value to capitalist production. In fact abstract objects have the effect of qualitatively expanding the commodity production possibilities of capitalism. We can illustrate with the very example which Marx uses to show that services do not amount to productive labour.

Assume that the pianist is playing her own original composition. Generally speaking, copyright statutes create copyright in musical works. The definition of musical works is usually very open-ended or sometimes not defined at all.59 But once copyright in a musical work exists the pianist has something to own, something to sell or license. The convenient mental fiction (the abstract object) becomes through law a commodity. The pianist is now in the same position as the piano maker, contrary to Marx’s assertion. She steps over the economic border that separates the badlands of unproductive workers from the rolling green fields inhabited by productive workers and enters the productive life of capital.

Intellectual property law is critical to her successful passage. It would, however, be a mistake to think that intellectual property law simply creates private property rights in the abstract object and so is no different from property rights in material objects. When he comes to analyse the exchange of commodities, Marx makes it clear that property and contract are necessary juridical phenomena for the exchange of commodities, but these are only reflections of underlying economic relations in the process of exchange.60 In fact one might go further and observe that what matters for the exchange of commodities is the recognition of rights of control and that these do not necessarily entail the existence of property rights. Commodities can exist and be traded without the existence of formal property rights. Presumably trade can take place in a state of nature. All that is required is some physical control over the goods. For our purposes, the point to observe is that in the case of material commodities the existence of the commodity does not depend on the existence of property rights. But this is not the case for abstract objects. Once copyright in musical works becomes part of law both our pianist and our piano maker can be said to produce commodities. But it is only the pianist who depends on intellectual property for the creation of her commodity. In the absence of an intellectual property right she is left to sell her concert performances (an unproductive service, according to Marx’s theory). Without intellectual property there simply would be no abstract object which participants in the market could recognise and make the subject of trade.

The argument we have put can be stated in the following propositions. The existence of physical commodities does not depend on law. The existence of abstract objects does. Commerce in physical commodities and abstract objects depends on a scheme of property rights and contract. Marx’s contradiction is that he sees labour as a value- producing commodity and yet does not recognise it as such when it is provided as a service or when it takes the form of an abstract object (in our sense of the term).

Now we are in a better position to see how intellectual property accomplishes the task of integrating creative labour into the capitalist mode of production. Marx more clearly than anyone sees that capitalism is a mode of production in which commodities are amassed on a historically unprecedented scale. Capitalism is not, however, the only mode of production which produces commodities. This is true of earlier forms of production. Where capitalism is distinctive is that it is a system in which the labour power of one class has become a circulating commodity available for purchase by another class, the members of both classes being formally free to buy and sell commodities.61 It is the condition of being able to readily acquire labour power that gives capitalism its Midas touch in economic production. Our argument has been that capitalism increasingly comes to depend on creative labour. Individual, rational capitalists, subject to competitive pressures, begin to seek out creative labour, for it is creative labour that is the source of much-wanted innovation. We have deliberately steered away from trying to explain this search in terms of the theory of surplus value. Rather our position is this: the search by individual capitalists for creative labour is motivated by the desire for control and ownership of the abstract object so as to gain a competitive edge over a rival. In the next chapter we shall see that the ownership of abstract objects can function to relieve individuals from competitive pressures. This provides another incentive for individual capitalists to chase the ownership of abstract objects. Clearly, if abstract objects exist under conditions of positive inclusive community (that is, they belong to all) the incentives for individual capitalists to pursue them will be considerably reduced. So one task of intellectual property law, from the perspective of the industrialist, is to create conditions of negative community so that the ownership of abstract objects is possible.

Intellectual property, in commodifying universal mental constructs, dramatically increases the commodity horizons of capitalism. Intellectual property is perhaps a sign that the commodity nature of capitalism never stops evolving. Marx thought that the commodity of labour power was the form of commodity that was distinctive to capitalism. Our analysis suggests that understanding the productive powers of capitalism does not stop with the commodification of labour power. Through the creation of abstract objects, intellectual property law provides capitalism with another distinctive commodity form and, potentially at least, another means to its further expansion. By creating abstract objects intellectual property brings creative labour directly into the relations of production. Capitalism can continue its historically spectacular commodity production run because through intellectual property law it has re-engineered the possibilities of commodity production. Not only that, creative labour, through the creation of more efficient means of production, actually diminishes the role of physical labour. The aim of the industrialist is no longer to control physical labour through contract and industrial relations law but to control creative labour through intellectual property law.

### Part 4 is the Advantage

#### Biotech –

#### Biotech is the new frontier – America ahead of China now but it’s close.

Gupta 6/11 [Gaurav Gupta, Biotech Investor, Founder of Ascendant BioCapital, a life science investment firm based in New York. Previously, Gaurav worked at OrbiMed Advisors, and served as a resident in neurological surgery at Columbia University Medical Center. He has co-authored over a dozen articles in peer-reviewed journals, filed a patent on a device for use in spine surgery, and edited a book on the technical and ethical implications of using tissue engineered products in the operating room. Dr. Gupta obtained his M.D. from the Stanford University School of Medicine, where he was a Paul and Daisy Soros Fellow, and B.S. and M.S.E. in biomedical engineering from Johns Hopkins University, where he was a Charles R. Westgate Scholar.) “As Washington Ties Pharma’s Hands, China Is Leaping Ahead” Barron’s Magazine: Commentary, China., 6/11/2021] RM rc//los altos bf

There should be no doubt that we are living at the dawn of a golden age of biomedical innovation. The American scientific engine that produced Covid-19 vaccines in record time was fueled by a convergence of advances in genomics, biomarkers, data science, and manufacturing years in the making. The first Food and Drug Administration approvals of a host of new product formats—oligonucleotide, bispecific, oncolytic virus, CAR-T, and lentivirus/AAV—all took place within the last decade. These represent an unprecedented expansion of the armamentarium that physicians have at their disposal to treat and cure disease. In the last few years, [47% of all new medicines](https://www.efpia.eu/media/554521/efpia_pharmafigures_2020_web.pdf) were invented by U.S. biopharma companies, with [homegrown startups](https://www.cbo.gov/publication/57126) driving the majority of innovation. The bulk of the remainder were developed by foreign companies specifically for the U.S. market.

An indirect benefit of these trends is that most novel therapeutics undergo clinical development and early commercial launch here in the U.S. The rest of the world understands that the American patient has earlier and broader access to groundbreaking therapies via these mechanisms. Indeed, the past decade is filled with examples of medical “firsts” for American patients: the first cure for Hepatitis C, the first gene therapy for blindness, the first immunotherapy for cancer. Future rewards will be greater still if we preserve our current system of incentivizing and protecting innovation.

The remarkable innovation capacity of our biopharmaceutical industry ought to be a source of national pride. Yet while “Made in America” is the global standard for medicines in development today, misguided policy risks ceding our scientific prowess to other countries in the future. This is particularly true in the case of China, where biotechnology has become a strategic pillar for the health of its people and economy.

From 2016 to 2020, the market capitalization of all Chinese biopharma companies increased exponentially from [$1 billion to over $200 billion](https://www.bloomberg.com/news/articles/2021-03-01/xi-mobilizes-china-for-tech-revolution-to-cut-dependence-on-west). China saw over [$28 billion](https://www.bioworld.com/articles/506978-china-sees-five-year-highs-in-life-sciences-investments-and-partnering) invested in its life sciences sector in 2020, double the previous year’s amount. Returns on China’s investment are already arriving. The FDA approved a drug developed in China for the first time ever in 2019. While China’s innovation capacity currently remains behind America’s, my experiences as a biopharma professional make it clear they are doing everything they can to catch up and catch up fast.

In fact, when I speak to Chinese biotechnology executives, they boast that they can run clinical trials faster than their U.S. counterparts. The danger of misguided policies that disincentivize pharmaceutical innovation in the U.S. is effectively driving that same innovation to China. If we close off the market in the U.S. at the same time that China is opening its market to innovative new products, then we will see companies choose to first launch impactful novel medicines in China, based on clinical trials conducted in China. Because the FDA rarely accepts data generated entirely outside the U.S., this relocation of research capacity will negatively affect Americans’ access to cutting-edge therapies.

#### Vaccine waiver gives China the biotech edge – wavering IPR and reliance.

Lawder, et al 5/8 (David and Andrea Shalal, Carl O'donnell “U.S. Wants COVID Vaccine Patent Waiver to Benefit World, Not Boost China Biotech.” Reuters, Thomson Reuters, 8 May 2021, www.reuters.com/world/china/us-wants-covid-vaccine-patent-waiver-benefit-world-not-boost-china-biotech-2021-05-08/.  ) //los altos bf

President Joe Biden on Wednesday [backed the U.S. entering negotiations](https://www.reuters.com/business/healthcare-pharmaceuticals/biden-says-plans-back-wto-waiver-vaccines-2021-05-05/) at the World Trade Organization for the waiver of intellectual property rights as a means to boost vaccine supplies by allowing poorer countries to make their own.

So far, vaccines have gone overwhelmingly to richer nations, which scooped up contracts for them earlier this year. COVID-19 infection rates in wealthy countries have dropped as vaccination rates increased this year, but[infections are still rising in 36 countries](https://www.reuters.com/world/factbox-worldwide-coronavirus-cases-cross-11038-million-death-toll-2546708-2021-02-02/), with India’s daily cases skyrocketing to nearly 400,000 a day.

Western pharmaceutical companies, many of which have received government support to develop vaccines, strongly oppose the transfer of intellectual property to make them. They say poorer countries will be slow to set up manufacturing capacity and compete for scarce supplies, hitting production.

Albert Bourla, CEO of Pfizer Inc, [said](https://www.linkedin.com/pulse/today-i-sent-letter-have-candid-conversation-our-drivers-bourla/?trackingId=p8C%2Fu3lALltT9tyeCAaSzA%3D%3D) on Friday that the proposed waiver would [disrupt progress made so far](https://www.reuters.com/business/healthcare-pharmaceuticals/pfizer-biontech-start-full-us-approval-application-covid-19-vaccine-2021-05-07/)in boosting vaccine supplies. “It will unleash a scramble for the critical inputs we require in order to make a safe and effective vaccine. Entities with little or no experience in manufacturing vaccines are likely to chase the very raw materials we require to scale our production, putting the safety and security of all at risk.”

Many companies and now some U.S. officials fear the move would allow China to leapfrog years of research and erode the U.S. advantage in biopharmaceuticals.

A senior Biden administration official said that while the priority is saving lives, the United States "would want to examine the effect of a waiver on China and Russia before it went into effect to ensure that it's fit for purpose."

A question and answer document produced by the administration and shared with industry representatives also acknowledges concerns that intellectual property sharing could damage the United State's competitive advantage over China, an industry source familiar with the discussions told Reuters.

The contents of the document read to a Reuters reporter by an industry representative said the Biden administration believes it can address those concerns through the WTO negotiations, but did not specify how. The source added that some agencies in the Biden administration have conflicting views of how to address the concerns in negotiations that are expected to take months.

Spokespersons at the White House and U.S. Trade Representative's office had no immediate comment on the matter.

Pfizer and Moderna spokespersons did not respond to requests for comment on technology transfer concerns, while a Novavax spokesperson referred Reuters to the company's [statement](https://ir.novavax.com/news-releases/news-release-details/novavax-statement-opposition-wto-trips-waiver) opposing the waiver on Friday, which said proposals to "weaken intellectual property protections would not achieve equitable vaccine access."

Enforcing limits on use of the technology could be very difficult, once handed over, some analysts say. Messenger RNA, used in COVID-19 vaccines by leaders Pfizer/BioNTech and Moderna, is a newly developed biotechnology that holds promise for treatments far beyond vaccines.

China and Russia have their own vaccines that do not use this biotechnology.

"It took Pfizer and Moderna years and years of research to develop these vaccines," said Gary Locke a former U.S. ambassador to China and U.S. Commerce Secretary. "China, Russia, India, South Africa and others want to gain access. Their intention is to get the underlying know-how so they can use it to develop further vaccines," Locke said.

China's Fosun Pharma has struck a deal with BioNTech on COVID-19 vaccine product development, which would potentially give it access to some of the technology.

China has high ambitions for its pharma industry and already is developing its own mRNA vaccine.

Patents themselves are publicly accessible, noted James Pooley, intellectual property attorney and former deputy director general of the United Nations' World Intellectual Property Organization. But trade secrets developed by Pfizer/BioNTech, Moderna and others, "cook books" of manufacturing processes such as temperature and growing conditions, have not been made public. That may ultimately be a dual problem for negotiators. Before they protect the knowledge, U.S. officials would have to ensure access to it.

Those companies would need to be [persuaded to come to the bargaining table](https://www.reuters.com/business/healthcare-pharmaceuticals/us-move-loosen-vaccine-patents-will-draw-drug-companies-bargain-lawyers-2021-05-07/) to give up such trade secrets.

“What happens when it turns out that the U.S. can’t actually deliver the information that is critically important to implementing the inventions?” Pooley asked. “This will be seen as another failure by the U.S. and other rich countries to keep their promises.”

#### China will leapfrog the US through biotech primacy.

Cumbers ‘20 [John Cumbers, “China’s Plan To Beat The U.S. In The Trillion-Dollar Global Bioeconomy” Forbes, 2/3/2020, https://www.forbes.com/sites/johncumbers/2020/02/03/china-now-out-invests-america-in-the-global-bioeconomy-by-30/] RM rc//los altos bf

China is out-investing the U.S. China’s private investors poured $14.4 billion into its bioeconomy in 2019. That compares to the United States’ more meager investment of $10.4 billion.

China is building a bigger bioeconomy workforce. China graduates about 8-10 million students each year. In the U.S., that number is closer to 400,000. Many Chinese students graduating from U.S. institutions stay here, but they are increasingly returning home to start highly innovative companies.

China is investing in itself. Historically, China has invested heavily in foreign companies, tech, and debt. Now we’re seeing an uptick in China-to-China investments—the country no longer needs to look abroad to find plenty of good biotech opportunities.

Chinese investments have led to centers of excellence in the regional technology hub of Shenzhen, including the Institute of Synthetic Biology at the Shenzhen Institute of Advanced Sciences (SIAT) and BGI Genomics. Shenzhen will compete for technological and economic leadership with U.S. regional biotech powerhouses such as San Francisco/Silicon Valley and Boston/Cambridge in the years to come.

Many of China’s long-standing challenges—environment, food, water, waste management, and rapid innovation to retain its global manufacturing competitiveness—are areas where synthetic biology is seen as a key technology for the future. In other words, synthetic biology is not just an academic pursuit for China. Rather, its leaders are thinking proactively about how biological engineering can be used to address the country’s strategic national interests—while U.S. leadership stands idly by.

#### China passes the US and creates their own liberal order locking in multipolarity – trying to go back to unipolarity eviscerates cooperation that solves a litany of existential risks – arms racing, future tech, climate change.

Sachs ‘17 Jeffrey D. Sachs, Jeffrey David Sachs is an American economist and director of the Earth Institute at Columbia University, where he holds the title of University Professor, the highest rank Columbia bestows on its faculty. “Learning to love a multipolar world.” The Jordan Times. January 15, 2017. <http://www.jordantimes.com/opinion/jeffrey-d-sachs/learning-love-multipolar-world> rc//los altos bf

American foreign policy is at a crossroads. The United States has been an expanding power since its start in 1789. It battled its way across North America in the 19th century and gained global dominance in the second half of the 20th.

But now, facing China’s rise, India’s dynamism, Africa’s soaring populations and economic stirrings, Russia’s refusal to bend to its will, its own inability to control events in the Middle East and Latin America’s determination to be free of its de facto hegemony, US power has reached its limits.

One path for the US is global cooperation. The other is a burst of militarism in response to frustrated ambitions. The future of the US, and of the world, hangs on this choice.

Global cooperation is doubly vital.

Only cooperation can deliver peace and the escape from a useless, dangerous and ultimately bankrupting new arms race, this time including cyber weapons, space weapons and next-generation nuclear weapons.

And only cooperation can enable humanity to face up to urgent planetary challenges, including the destruction of biodiversity, the poisoning of the oceans, and the threat posed by global warming to the world’s food supply, vast drylands and heavily populated coastal regions.

Yet, global cooperation means the willingness to reach agreements with other countries, not simply to make unilateral demands of them.

And the US is in the habit of making demands, not making compromises.

When a state feels destined to rule — as with ancient Rome, the Chinese “Middle Kingdom” centuries ago, the British Empire from 1750 to 1950, and the US since World War II — compromise is hardly a part of its political vocabulary.

As former US president George W. Bush succinctly put it, “you’re either with us or against us”.

Not surprisingly, then, the US is finding it hard to accept the clear global limits that it is confronting.

In the wake of the Cold War, Russia was supposed to fall in line; but President Vladimir Putin did not oblige.

Likewise, rather than bringing stability on US terms, America’s covert and overt wars in Afghanistan, Iraq, Syria, Libya, South Sudan and elsewhere created a firestorm stretching across the greater Middle East.

China was supposed to show gratitude and deference to the US for the right to catch up from 150 years of abuse by Western imperial powers and Japan.

Instead, China has the audacity to think that it is an Asian power with responsibilities of its own.

There is a fundamental reason, of course, for these limits.

At the end of World War II, the US was the only major power not destroyed by the war. It led the world in science, technology and infrastructure.

It constituted perhaps 30 per cent of the world economy and formed the cutting edge of every high-tech sector.

It organised the post-war international order: the United Nations, the Bretton Woods institutions, the Marshall Plan, the reconstruction of Japan and more.

Under that order, the rest of the world has closed much of the vast technological, educational and infrastructural gap with the US.

As economists say, global growth has been “convergent”, meaning that poorer countries have been catching up.

The share of the world economy represented by the US has declined by roughly half (to around 16 per cent currently).

China now has a larger economy in absolute terms than the US, though still only around one-fourth the size in per capita terms.

None of this catching up was a perfidious trick against the US or at its expense.

It was a matter of basic economics: given peace, trade, and a global flow of ideas, poorer countries can get ahead. This tendency is to be welcomed, not shunned.

But if the global leader’s mindset is one of domination, the results of catch-up growth will look threatening, which how many US “security strategists” view them.

Suddenly, open trade, long championed by the US, looks like a dire threat to its continued dominance.

Fear-mongers are calling for the US to close itself off to Chinese goods and Chinese companies, claiming that global trade itself undermines American supremacy.

My former Harvard colleague and leading US diplomat Robert Blackwill and former State Department adviser Ashley Tellis expressed their unease in a report published last year.

The US has consistently pursued a grand strategy “focused on acquiring and maintaining preeminent power over various rivals”, they wrote, and “primacy ought to remain the central objective of US grand strategy in the twenty-first century”.

But “China’s rise thus far has already bred geopolitical, military, economic, and ideological challenges to US power, US allies, and the US-dominated international order”, Blackwill and Tellis noted.

“Its continued, even if uneven, success in the future would further undermine US national interests.”

US President-elect Donald’s Trump’s newly named trade adviser Peter Navarro agrees.

“Whenever we buy products made in China,” he wrote last year of the US and its allies, “we as consumers are helping to finance a Chinese military build-up that may well mean to do us and our countries harm”.

With just 4.4 per cent of the world’s population and a falling share of world output, the US might try to hang on to its delusion of global dominance through a new arms race and protectionist trade policies.

Doing so would unite the world against US arrogance and the new US military threat.

The US would sooner rather than later bankrupt itself in a classic case of “imperial overreach”.

The only sane way forward for the US is vigorous and open global cooperation to realise the potential of 21st century science and technology to slash poverty, disease, and environmental threats.

A multipolar world can be stable, prosperous, and secure. The rise of many regional powers is not a threat to the US, but an opportunity for a new era of prosperity and constructive problem solving.

### Part 5 is the Underview

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

#### [2] The neg must only defend the squo a) the aff can only indict the squo, which means counteradvocacies can delink all aff offense, forcing a 1ar restart while b) exploding neg ground- they can run any advocacy they want as long as it isn’t the exact same as mine, kills fairness c) clash- Non-converse advocacies sidestep AC offense and engagement on the aff contention because they don’t address the same issues the aff does. This is the best clash because it preserves the relevance of all original aff offense. Clash is the internal link to education because actual discussion is necessary for development of issues.