Coloniality of Waithood: Africa's Wait for COVID-19 Vaccines amid COVAX and TRIPS

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Abstract: African nations have struggled to secure lifesaving COVID-19 vaccines, while rich nations have purchased more than they needed, depleting the global supply. High vaccine prices and intellectual property regulations that block the production of cheaper generics have contributed to a condition of African waithood. Hagan examines this waithood, which characterizes the disjuncture between African countries' existential and humanitarian need for COVID-19 vaccines and corporations' quest for profits in the pandemic. African waithood, produced by pharmaceutical companies including Moderna and Pfizer, is a direct product of colonialism. Waithood echoes the ongoing colonial relations between African nations and the corporations that continue to exploit them.

Résumé: Les pays africains ont eu du mal à obtenir des vaccins vitaux contre la COVID-19, tandis que les pays riches ont acheté plus que nécessaire, épuisant ainsi l'approvisionnement mondial. Les prix élevés des vaccins et les réglementations en matière de propriété intellectuelle qui bloquent la production de génériques moins chers ont contribué à une condition africaine d'attente. Hagan examine cette attente, qui caractérise la disjonction entre le besoin existentiel et humanitaire des pays africains en vaccins contre la COVID-19 et la quête de profits des entreprises dans la pandémie. Cette condition africaine d'attente produit par des sociétés pharmaceutiques telles que Moderna et Pfizer, représente un exemple de colonialisme concret. Cette attente africaine fait écho aux relations coloniales en cours entre les nations africaines et les entreprises qui continuent de les exploiter.

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Resumo: As nações africanas têm tido dificuldade em assegurar a obtenção das vacinas contra a COVID-19, essenciais para salvar vidas, ao passo que as nações ricas compraram mais vacinas do que precisam, depauperando a oferta mundial. O preço elevado das vacinas e a legislação relativa aos direitos de propriedade intelectual que impedem a produção de genéricos baratos contribuíram para deixar o continente africano em compasso de espera. Hagan analisa este compasso de espera, o qual traduz, por um lado, o desencontro entre a necessidade existencial e humanitária de vacinas contra a COVID-19 nos países africanos e, por outro lado, o empenho das corporações em fazerem o máximo lucro com a pandemia. O compasso de espera africano, criado por empresas farmacêuticas como a Moderna e a Pfizer, é um produto direto do colonialismo. O compasso de espera espelha as atuais relações coloniais entre as nações africanas e as corporações que continuam a explorá-las.

Keywords: waithood; vaccines; colonialism; Africa; TRIPS; COVID-19

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Pandemic, Medical Emergency, and Vaccines

In the push to establish equitable access to COVID-19 vaccines and other technologies, many African nations have failed to receive sufficient amounts of vaccines in order to vaccinate their populations. The total amount of vaccines that Africa has received remains low. According to the Africa CDC, the continent has received 790.7 million doses as of May 2022. Comparatively, Europe distributed one billion vaccine doses to Europeans by October 2021.2 As of May 2022, the total amount of COVID-19 vaccine doses administered in Europe was approximately 167.53 doses per 100 people, or 1.25 billion.³ To put these figures in perspective, Africa has a population of 1.4 billion inhabitants, while Europe has only 748.5 million.⁴ As of February 2022, more than 80 percent of people in Africa had yet to receive a single dose of COVID-19 vaccine (Partners In Health 2022).

In this article, I will develop three fundamental arguments. First, African countries and Africans living on the continent have experienced many delays in receiving COVID-19 vaccines during the ongoing COVID-19 pandemic. Pharmaceutical companies, backed by several international actors including the US, the EU, and the World Trade Organization (WTO), have decided who gets access to vaccines by setting prices and refusing to support IP (intellectual property) waivers. They have also refused to disclose trade secrets that would allow less wealthy nations to create viable and affordable generic drugs. These actions have produced a waithood, a political-economic condition in which people are forced to wait for material conditions necessary to survive by the institutions that control those materials.

Second, the refusal to issue an intellectual property waiver of patent protections and to disclose important trade secrets keep African nations from access to affordable lifesaving technologies, and are an attempt to block competition. These refusals constitute a withholding. This practice of withholding secrets and materials helps institute the waithood for vaccines and other COVID-19 technologies that Africans have experienced. COVAX, the financialization instrument that the World Health Organization (WHO) and GAVI operate which allows underdeveloped nations to purchase subsidized COVID-19 vaccines, is a highly financed platform. Major pharmaceutical companies characterize the provision of patented technologies to African countries without financial guarantees as financial risk to private capital. As a response to this, the WTO, the EU, and the US have relied on the increasing financialization structure of COVAX to de-risk the intervention of providing medical technologies to African countries during this pandemic. This manipulation of COVAX, along with the withholding of both trade secrets and IP waiver support, reflect the pharmaceutical companies' paramount interest in protecting their investments and securing profit. The lives that will potentially be lost to COVID-19 because of the waithood imposed by these actions are second to company profits.

Third, I argue that this waithood, which is produced by pharmaceutical companies including Moderna and Pfizer, is a direct product of colonialism. Waithood reflects the colonial relations between Africa and the often exploitative corporations that have historically preved on Africa for profits. Multinational corporations (MNCs), the US, and Europe have long considered Africa as a site for scientific experimentation on vaccines to deadly diseases, as well as a site for capitalist expansion. By maintaining high costs of vaccines that low-income nations have thus far struggled to pay, while blocking those nations from access to cheaper, more equitable alternatives, pharmaceutical companies exert some economic control over African nations. Underdeveloped countries can try to wait for more favorable economic terms, for IP protections to fall, or even for the pandemic to end, yet there is no indication that improved economic prospects are on the horizon, and Big Pharma may not change its stance on IP rights and enforcement. Meanwhile, many Africans may die in the long interim. Nations could attempt to take out loans and pile on crushing debt, further tying themselves to the IMF and other neoliberal institutions in a form of economic neocolonialism (Nkrumah 1965). This forced waithood by the pharmaceutical industry exerts a heavy economic influence over African nations, influence that favors the MNCs.

I base my arguments on an analysis of public health scholarship on COVID-19 across Africa, and the COVAX data on COVID-19 vaccine distribution to Africa. I also examine the recent history of (post)colonial epidemics on the African continent. Collectively, these data help reframe the narrative of a poor and helpless Africa during the pandemic as one of a continent experiencing colonial waithood. While this article has the significant methodological constraint of relying on text analyses rather than new ethnographic fieldwork, my long-term ethnographic engagements with modes of rescue, humanitarianism, and neoliberal logics that undergird contemporary development projects in Africa animate and shape this article. Through the various COVID-19 data and news reports detailing the issues with vaccine distribution to African nations, I will explain the ways that pharmaceutical companies have forced Africans to wait for access to vital COVID-19 technologies. These moments of forced waiting for vaccines underscore the coloniality of waithood.

Waithood

Alcinda Honwana defines waithood as the period of suspended transition between childhood and adulthood, a condition in which African youth experience a structural precarity and instability due to the lack of stable jobs and the increasing difficulties of supporting their families (Honwana 2012, 2014). Global economic structures produce and reproduce contemporary waithood, and these translate into an unequal distribution of societal resources and life chances in Africa (Dobler 2020). The concept of waiting as a condition or state of being is useful for thinking about the predicament of the African continent in terms of acquiring important medicines. I am not equating African countries with undeveloped and disadvantaged youth, yet I use this framework of waithood to characterize the disjuncture between the material need for medicines and the satisfaction of that need in a medical emergency on a regional scale. The condition of waithood, in Honwana's interpretation, is the same, as African nations cannot realize a safe future in which they have the latest medical protections and treatments against disease. All the while, the United States, Canada, and several European countries have had little to no trouble quickly accessing and even stockpiling these vaccines.

Much like Honwana's formulation of waithood, in which African youth do what they can to get by in lieu of securing gainful employment, African communities have taken various measures to mitigate the spread and devastation of COVID-19, despite the low numbers of vaccines and other technologies available to them. African nations have relied on public health and social measures (PHSMs) that include social distancing, temporary lockdowns, and aggressive border COVID-testing to mitigate COVID-19 transmission and keep incidence and fatality rates low (Salyer et al. 2021). However, COVID-19 has taken a toll on the already under-resourced public health systems across the continent. Some of the implemented PHSMs and mitigation strategies, including travel restrictions, lockdowns, the repurposing of health resources, and the suspension of prevention programs such as immunizations, may ultimately result in an increase in new COVID-19 infections as well as resultant deaths (Inzaule et al. 2021).

Public health communications have been complicated and rendered less effective due to inequitable vaccine access in Ghana (Adekunle & Mohammed 2022) and Kenya (Orangi et al. 2021), as well as South Africa and Zimbabwe (Dzinamarira et al. 2021). The same is true elsewhere on the continent, as 57 percent of respondents in a Kenyan study (Orangi et al.

2021) and 74.5 percent of respondents in a Nigerian study (Adebisi et al. 2021) expressed the desire to receive the COVID-19 vaccine. A study across five West African countries (Burkina Faso, Guinea, Mali, Senegal, and Sierra Leone) on vaccine hesitancy among adults and their attitudes toward vaccinating their children showed that adults' willingness to receive the vaccine was congruent with their intention to vaccinate their children when the vaccines become available (Faye et al. 2022). While many African countries have engaged in risk communication and community engagement strategies to combat the spread of the virus in lieu of vaccines (Adebisi et al. 2021), vaccines remain essential components of many effective and sustained disease control efforts. Despite the low COVID-19 incidence and mortality rates in African countries compared to wealthier nations, the implications of PHSMs and other mitigation strategies underscore the importance of bona fide COVID-19 medical technologies, including vaccines, testing, and treatments. However, Africa has lagged behind other regions of the world in terms of vaccines received and vaccine doses administered within the continent.

Why Waithood Over Waiting

As a strategy, waiting can be an important step one should actively take in order to achieve something in the future. For example, Moroccan youth exhibit this strategy by abstaining from Moroccan civic life while they save their energies to ready themselves for a chance to escape to Europe (Elliot 2021). The strategized waiting for migration temporarily forecloses expectant youths' participation in certain life activities that are cultural norms at their ages, including work, study, and marriage. Such failure to engage in these cultural norms demonstrates the opportunity cost of planned waiting, and entails a well-known political economic risk. For some, the potential boons offered by life in Europe outweigh the costs of waiting to emigrate.

However, this system of strategic waiting differs markedly from the concept of waithood, the condition of forced waiting. Much of the existing scholarship on waithood across Africa focuses on the experiences of individuals. Waithood has characterized African experiences throughout the twentieth and twenty-first centuries, in which young people have waited for futures that have yet to arrive (Ferguson 1999; Piot 2010; Stasik, Hänsch, & Mains 2020). Regarding African migrants waiting for opportunities to move, time itself threatens to trap migrants within perpetual waithood, just as much as it promises a better life in the future (Jefferson & Segal 2019). Vaccine colonialism has demonstrated the usefulness of applying the concept of waithood on a national scale, because waithood here describes the existential situation of Africa within this pandemic and within the global regime of colonial relations. This existential nature of African countries in relation to wealthier nations differs in scale from the existential conditions that individuals experiencing waithood face (e.g., waithood for migration, or for jobs). Since waithood today is (re)produced by global economic structures, I am interested in waithood on this continental scale.

African Waithood for COVID-19 Vaccines

Vaccine nationalism, IP enforcement, and the low GDP of many African economies relative to those of Western Europe and the US are devastating conditions that have allowed vaccine waithood to take root across the African continent. Several wealthy nations, including the US and the UK, have struggled throughout the pandemic to contain the spread of the COVID-19 virus and mitigate deaths. However, these difficulties have nothing to do with the lack of available vaccines and associated technologies. In fact, these nations have amassed large stores of COVID-19 vaccines as reserves (Kretchmer 2021; Riaz et al. 2021). Other nations have had to make do with less. As the prices for vaccine technologies increase over time, low-income nations will continue to struggle to pay for them. Because of vaccine nationalist consumption, developing countries will undoubtedly face diminished opportunities to access these supplies as stocks dwindle (Çakmaklı et al. 2021). While wealthy nations have had relatively easy access to vaccines, low-income nations have faced many obstacles, and this discrepancy is embodied in the COVID-19 Vaccines Global Access (COVAX) program, a global initiative created to facilitate equitable access to COVID-19 vaccines.5

The UN, which helps run the program with GAVI, has accused the US and other world powers of "vaccine nationalism" (Riaz et al. 2021), the economic strategy of hoarding vaccines from manufacturers to increase supply in their own countries. Through this hoarding, mainly through bilateral agreements between wealthy nations and manufacturers, those select few countries have used their money to gobble up most of the available vaccines in excess of their countries' needs, irrespective of the limited distribution of vaccines to low-income nations. Under the COVAX scheme, almost all African nations are categorized as Advanced Market Commitment (AMC) recipient countries, meaning they received partially funded access to several vaccines (GAVI 2020). In this scheme, they cannot out-compete the wealthier nations who struck quick bilateral deals with the vaccine manufacturers, both of whom circumvented the COVAX purchasing mechanism in which many of them were participants (most of the wealthier nations participating were donor countries). These competitive behaviors reduced the COVAX supply of vaccines to be allocated and distributed to AMC-eligible countries. It is this vaccine nationalism and these competition-based tactics that have produced this waithood, which has forced African nations to wait for allocations of vaccines to trickle down to them via the undermined and lackluster COVAX program. Even after India's COVID-19 drugs were added to the COVAX program in 2021, India instituted a COVID-19 vaccine export ban, in which it reserved most of the COVID-19 vaccines it produced for domestic use (Roy & Agarwal 2021). As a result, other nations, especially many African ones that depended on the Indian-produced vaccines, had to wait longer for vaccines to come through the COVAX pipeline.

Notions of African Immunity and Vaccine Experimentation

Speculations and theories about Africans being biologically different from other humans and inherently immune to COVID-19 prompted many researchers to test for "inherent immunity" among African populations rather than focusing on vaccines for them. This medical prioritization legitimated theories of African biological difference and further de-emphasized a vaccine push for the continent. In fact, one article published in Science noted that Epicentre Africa, the research and training arm of Doctors Without Borders, raised the idea that because millions of Africans have already been infected, Africa should attempt to reach herd immunity. This controversial idea of letting the virus run its course would have killed many in the process (Nordling 2020).

In April 2020, French medical doctor Jean-Paul Mira proposed on national television that France should test the efficacy of tuberculosis medications as treatment for COVID-19 on Africans. He and fellow doctor Camille Locht were discussing a clinical trial in Europe and in Australia, when Mira quipped, "If I can be provocative, shouldn't we be doing this study in Africa, where there are no masks, no treatments, no resuscitation? A bit like as it is done elsewhere for some studies on AIDS. In prostitutes, we try things because we know that they are highly exposed and that they do not protect themselves." This comment sparked public claims of racism, and many people, including prominent African celebrities and political figures, called out the two doctors for racism (Okwonga 2020). Many expressed anger at the continued evil treatment aimed toward Africa and its peoples. The doctors apologized; however, this renewed the narrative of Africa representing a human laboratory for Western tinkering and testing, and it recast Africa as an inexhaustible and inconsequential site of material resource extraction for the benefit of the West. We have seen this drama before.

In 1957, colonial officials administered the live-attenuated oral polio vaccine (OPV) developed by Hilary Koprowski throughout the Belgian Congo (now the Democratic Republic of Congo) and the other Belgian colonies in Africa. Even though the vaccine trials vaccinated more than 1 million people in the Belgian colonies, the end goal was not to vaccinate them, but rather to test the efficacy of the OPV so that it could be approved for use and distribution in the United States. According to Kaprowski, he received requests from Belgian colonial doctors to conduct OPV vaccination in infants and children exposed to polio in the western region and the capital of Leopoldville in Belgian Congo. After agreeing to those requests, he later oversaw the vaccination of 250,000 Congolese with OPV (Koprowski 2006). These historical moments suggest that past efforts to vaccinate Africans rested on the expectation that biological information and data derived from this experimentation would provide immense scientific benefits to Western countries. Pharmaceutical companies could then produce better vaccine products for their Euro-American consumers. Such efforts ignored the idea of vaccinating or caring for Africans for the sake of African lives.

I bring up polio in colonial Africa to highlight the historical contours of waithood and how global vaccine markets have relied on the exploitation of Africa(ns) in the past. This exploitation has produced a temporality that has situated African nations' access to vaccines as coming after Euro-American countries have acquired vaccines first. The logic of scarcity of COVID-19 vaccines, characterized by the uncertainty of future availability of vaccines and the difficulty some nations have experienced in acquiring them, temporalizes debt relations by accelerating nations' debt accumulation to finance vaccine purchases. In other words, low-income countries that are increasing their debt burdens to buy vaccines are racing the clock, trying to obtain vaccines as quickly and affordably as they can, before prices increase out of reach, and before more people die. Demonstrating this phenomenon, the World Bank approved a USD454.4 million loan to South Africa to fund the country's COVID-19 purchases (Reuters 2022). However, most vaccineneedy African countries have been reluctant to take out additional loans to secure COVID-19 vaccines (Adepoju 2021).

During the HIV/AIDS pandemic of the early twenty-first century, Africa saw a similar temporalization of behaviors as a result of limited access to precious medications. In their analysis of temporality in the era of HIV/AIDS, Aida Benton, Thurka Sangaramoorthy, and Ippolytos Kalofonos (2017) argue that the scarcity of HIV/AIDS programs temporalized the responsibility of HIV-positive individuals to the members of their communities. Having received antiretrovirals (ARVs) and treatment through these programs, HIVpositive persons had earned "more time" and had a responsibility to live well and follow the compliance rules for staying on ARVs. In the COVID-19 pandemic, the temporalization of African states' responsibility to protect their citizens, among the difficult economic conditions they have endured since independence, has caused them to take on more debt faster, in order to pay for the high-priced lifesaving COVID-19 vaccines. That governments reacted quickly to try to acquire vaccines and have implemented PHSMs to mitigate the spread and devastation of the virus speaks to the race against time, and ultimately demonstrates their contempt for waiting.

Withholding Secrets from Risky Africa

TRIPS and Access to Vaccines

A March 2021 tweet by Carlos Lopes, former UN Secretary General and former Executive Secretary of the Economic Commission for Africa, read, "African countries have received less than 2 percent of the vaccines they have ordered, which already represents a fraction of the needs. This is what is meant by being at the end of the queue" @DevReimagined.⁷ Since January 2021, Western countries have purchased large quantities of the available vaccines, exhausting the market for them and effectively blocking vaccine access for the vast majority of the Global South.⁸

The Indian pharmaceutical industry, one of the most productive outside of Europe and the US, has been one of the main suppliers of pharmaceutical drugs to African countries that are otherwise waiting at the back of the queue. However, Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS) legislation has severely undermined the ability of Indian drug firms to make generic versions of patented drugs. As a result, TRIPS has hindered the availability of those affordable drugs to African markets and peoples. Drug manufacturers must wait until products are off patent before they can manufacture the generics themselves. Even compulsory licensing, the TRIPS provision that allows a government to produce a patented product without securing consent of the patent holder, is not a sustainable method for Indian drug manufacturers to quickly produce drugs at scale and distribute them.⁹ TRIPS legislation also introduced differential pricing, a compromise that supports the understanding that prices should be lower in developing countries compared to developed societies. This has allowed drug firms to recoup their research costs through high prices in the West, "while making products available at lower prices that are near actual production cost to the poor in developing countries" (Barton 2004). Despite this seemingly equitable agreement, by which wealthier nations contribute more toward research costs than low-income nations, the fact remains that the pharmaceutical giants determine drug pricing across the globe, through the security of their patent controls and the backing of the WTO, the EU, and the US. Thus, affordable drug access remains a critical issue for low-income countries with low or nonexistent pharmaceutical production capacity, even after the introduction of COVAX, the supposedly cost-equitable financing mechanism.

COVAX, Financing, and Philanthrocapitalism

COVAX represents a pandemic response grounded in the notion that fighting COVID-19 and mitigating its effects on the poor should not come at the expense of the accumulation of profits and wealth for companies (Sklair & Gilbert 2022). This response has produced philanthrocapitalism, a description of the set of philanthropic approaches that draw heavily from business management and promote market-based solutions (Haydon et al. 2021). This "philanthrocapitalist epoch" characterizes how such philanthropic and market logics have contributed to the broader financialization of development in the current moment (Kumar & Brooks 2021:335–88). One feature of this philanthrocapitalist epoch is a shift from grant-making toward a series of forprofit "impact investment" strategies (Sklair & Gilbert 2022). This shift has fundamentally altered the scope of philanthropy and has simultaneously challenged the concept of inherent conflict between public welfare and private quest for profit, a concept that has for centuries been foundational to Euro-American legal theory (McGoey 2021).

Philanthrocapitalist entities such as the Bill and Melinda Gates Foundation built COVAX, a public-private partnership and COVID-19 vaccine distribution platform that provides "funded" (financed) vaccines to AMC-recipient

(low- and moderately-low-income) countries. COVAX also functions as a form of insurance to "self-financing" (donor) countries who engaged in Advanced Purchase Agreements (APAs) with pharmaceutical companies, should those backdoor agreements fail to materialize. These APAs, or on-the-side bilateral agreements, allowed self-financing countries to purchase vaccines before the AMC-recipient countries after the initial rollout of COVAX. Of course, this advanced purchasing placed low-income African nations at the back of the queue, where they would have to try and purchase whatever remained and wait for the COVAX vaccine stocks to replenish. Similar to the temporal manipulation that ARV-scarcity introduced to many HIV-positive Africans in the 2000s, this temporal ordering of "rich countries first" and "poor Africans second" was deliberately instituted by COVAX, the funding mechanism that philanthrocapitalists designed to purportedly ensure vaccine access and prevent such temporal inequalities.

The COVAX platform, which was designed to ensure equitable access to vaccines for low-income nations that otherwise might struggle to purchase vaccines at market rates, actually has profound inequalities built into its design (Balaji 2021). In other words, COVAX has itself made access to vaccine doses difficult to achieve for many AMC-recipient nations around the world, including most African nations. COVAX has limited the potential scaling up of vaccine availability to meet the production capacity of the patent-holding pharmaceutical manufacturers, the same pool of manufacturers with whom self-financing nations have been rushing to secure vaccine APAs (Sklair & Gilbert 2022). 10 It would seem that COVAX has undermined the possibility of achieving its own stated goals.

A Colonial Relation: Blocking Generic Vaccine Production

While the pharmaceutical industry wanted to protect its IP and strictly enforce IP laws, it has also sought to protect and burnish its public image throughout this global emergency. To that end, it carefully wove the narrative that portrays drugmakers as companies driven by altruistic and humanitarian motives, including the desire to protect innovation and research, and to ensure safe and responsible vaccine production (Lazare & Oamek 2021). Out of these talking points about how intellectual property produces creativity emerged the drug makers' key argument: sharing vaccines with lowincome nations is a bad idea because they lack the facilities and capacity to quickly and safely produce vaccines (Lazare & Oamek 2021). This falsehood rests on the long-standing racist assumption that Africa and other poorer regions of the world do not have the pharmaceutical capacity to produce quality goods and must therefore depend on their more intelligent and modern former colonizers for aid.

Not only did American drug executives and lobbyists strongly oppose any patent sharing, but they also demanded that the US sanction any country that dared to violate TRIPS and patent rights. One biotech lobbyist went so far as to say, "Patents are the reason that COVID-19 vaccines exist. Waiving them

would undermine our response to this pandemic and future health emergencies" (Fang 2022). This constitutes a second lie: namely, that patent sharing is bad and undermines vaccine production. Recently disclosed US federal government pandemic contracts and the details of a vicious patent infringement lawsuit against Moderna show the extent to which US-produced COVID-19 treatments were fast-tracked, using the same type of involuntary patent sharing that the pharmaceutical industry publicly decried (Fang 2022). The recently released contracts reveal that the Trump administration used a World War I-era law that gives companies in the race to produce COVID-19 technologies the special authority to seize virtually any patent they desired without authorization. This is compulsory patent licensing, the same provision that the US, Europe, and Western-based pharmaceutical companies have blocked low-income nations from using to make affordable generics.

The disclosure revealed sixty-two federal pandemic-related contracts including contracts with major pharmaceutical companies such as Corning, Eli Lilly, Merck, Qiagen, Moderna, and Siemens—that contained clauses that referenced the regulations associated with the compulsory license-granting World War I law (Fang 2022). With this move, the cartel of Euro-American pharmaceutical giants secured not only high prices for their drugs, but the ability to alter those prices at will and without facing competition from cheaper generics. Such generics could be manufactured and distributed throughout the poorer countries of the world. Big Pharma sees that as an economic competition problem rather than a humanitarian solution. Today, most trade agreements enacted after TRIPS that involve IP-rich nations feature IP provisions that extend far beyond the TRIPS obligations stipulated by the WTO (Sell 2020). Profitability for pharmaceutical companies is a function of those companies' abilities to "extract monopoly rents from complex value chains using their control over IPRs" (Schwartz 2017:197).¹¹ Such neocolonial relations, including the economic control over African nations, result in the imposition of waithood. Again, if countries choose not to wait, they can pay the high prices, a demonstration of Euro-America's economic control over vaccine-needy African states.

The financialization of capitalism has altered the behaviors of nonfinancial corporations, including pharmaceutical companies. Financialization's prioritization of value extraction over value creation in order to maximize shareholder profits manipulates innovation to generate wealth (Sell 2020). In other words, financialization leverages innovation for profit, not as a way to respond to the health needs of people, and does not envision health innovation as a means to facilitate the emergence and diffusion of higher-quality products at competitive cost (Mazzucato & Roy 2019).

Financialized capitalism's profit imperative is responsible for pharmaceutical giants investing far more resources in lifestyle diseases and related drugs (e.g., erectile dysfunction and male pattern baldness) than in diseases that disproportionately affect the Global South. This system of incentives is not aligned with societal issues or goals (Feldman 2018). In this set of discordant goals, the contours of the moral project that is vaccine production are clear. Within the structure of capitalism and the incentives of financialization, the creation of lifesaving medical technologies juxtaposes an ostensibly altruistic and humanitarian purpose with a (mostly) contradictory profitdriven one. The philanthrocapitalist era symbolizes this misalignment. Bill Gates, a global philanthropist plutocrat who invested heavily in COVAX through the Bill & Melinda Gates Foundation, saw his wealth increase by over USD10 billion during the COVID-19 pandemic. The generation of all these monies via these financialization and corporate incentive structures ultimately raises questions about ethics, governance for equity, and the public good (McNamara & Newman 2020:10; Schwab 2020). Along with Big Pharma's rejection of bids for patent waivers, it deploys the process of evergreening, in which patent holders make minor modifications to a drug in order to secure a new patent, effectively extending the previous patent, often indefinitely (Collier 2013; Dwivedi et al. 2010). In the face of these tactics, African nations are waiting for concessions from pharmaceutical companies and patent expiration, neither of which may ever come to pass. Such neocolonial extractivism under the fetters of twenty-first century capitalism produces an imposed—and not strategic—waithood among those who cannot pay the exorbitant market prices for these technologies, namely, most African states.

Aid Conditionality, Withholding, and TRIPS as Vaccine Access Prevention

In this current capitalist environment, non-vaccine producing WTO-member states that want to avoid paying exorbitant prices for vaccines have only a few options. Unless the WTO granted them waivers from TRIPS obligations, those countries would have to wait for the pharmaceutical giants to offer generics themselves, or reach an agreement with the WTO that would allow member states to produce generics. Waiting twenty years for the expiration of patents during a pandemic in which the protected technologies could save lives in the present would constitute a long wait, and countless people would doubtless suffer in the interim. Only after large financial commitments has COVAX been able to allocate and distribute vaccines to AMC-recipient countries. To be clear, the forty-six African AMC-recipient countries have been waiting to receive enough vaccine doses to vaccinate their populations since vaccines have become available. 12

Along with the US and Europe, the pharmaceutical industry's refusal to grant a patent waiver shows its unwillingness to broker deals with low-income nations to improve their access to COVID-19 technology. Important COVID-19 technologies blocked behind the IP wall include vaccine reproductive capabilities, testing, and treatments. Regarding trade secrets, pharmaceutical companies fear that the revelations of such undisclosed information would lead to a reduced competitive advantage, including through the disclosure of information and data submitted for marketing approval (Correa 2002), and the publication of clinical trial data (Durkin et al. 2021). It is specifically through the act of withholding information or trade secrets (patents,

technical data, etc.) that pharmaceutical companies, the WTO, and pro-IP communities (such as the UK, EU, and US) have created a violent condition of waithood. Thus, withholding emerges as a key feature of pro-IP groups, in which companies refuse to allow other nations to create generics of patented drugs, withhold trade secrets, and block access to technical know-how for manufacturing and distributing vaccines, tests, and treatments.

Withholding aid to African nations has been a key instrument of US and European international relations for decades. This process is described as aid conditionality, the setting of policy goals in exchange for aid (Montinola 2010). During the Cold War, aid conditionality reflected how important donor states, such as the US, prioritized strategies that increased the spread of their political influence in Africa. However, after the end of the Cold War, Africa's geopolitical importance to the West diminished, and as a result, the development-aid instrument of withholding aid became more credible and effective (Dunning 2004). Aid conditionality became more possible and more effective, and the donors' threats of withholding aid to African states was taken more seriously. With this success, withholding emerged as an effective donor tool in postcolonial development relations between Euro-America and Africa.

Governments are not the only entities that have instrumentalized the needs of Africans amid the emergencies and poverties wrought by (post) colonialism. MNCs that operated in Africa in the 1970s and 1980s dominated the corporate landscape and were able to create and provide export markets for the host country's products. In order to ensure that domestic consumption of products did not undercut their export markets, MNCs withheld these domestic markets by slashing local African jobs that depended on those exported materials and products (Udofia 1984).

In the 1980s, development aid became increasingly politicized, as the IMF and World Bank linked development rationalities with human rights and democratic institutions. The EU assumed explicit responsibility for promoting democracy and development, conditional upon the presence and functioning of democracy within the country seeking aid (Dimier 2006). The European Commission, which operates as the executive branch of the supranational EU, emphasizes the contractual nature of EU budgetary support to countries, and demands that recipients of development aid must demonstrate a commitment to uphold human rights, democracy, and law (EU Commission 2011). Rather than simply suspending aid to African countries as an ultimate sanction measure, EU actors have held recipient nations accountable by withholding a portion of budgetary aid (Langan 2015). The effective practices of aid conditionality have carried over into the arena of global health and pharmaceutical drugs. Vaccine financing as a means of providing vaccine access represents a new area of concern for the development-oriented pro-IP communities. Not only are the secretive contracts that deployed compulsory licensing examples of information withholding, but the pharmaceutical companies hiding their important vaccines technologies behind patents constitute withholding as well.

TRIPS vs IP Waiver

TRIPS produces inequitable access to vaccines and also produces the waithood countries have experienced in trying to acquire these protected medicines. TRIPS, heavily advocated for by the Western-based pharmaceutical companies in the US and in Europe, has effectively blocked other nations and companies from producing cheaper generic drugs that come at price points that many nations can afford. Countries such as South Africa have paid USD30-42 for the Moderna vaccine, generally more than the USD32-37 high-income countries have paid for the same vaccine. Similarly, Botswana confirmed that it paid more than USD29 per dose of the Moderna vaccine (Jimenez 2021). Uganda is reportedly paying USD7 for each dose of Astra-Zeneca's two-dose vaccine (Nakkazi 2021). While the price points African countries have paid look close to those rich nations have paid, they represent significantly greater cost to middle- and low-income nations compared to the costs borne by the wealthier US and EU. Pricing equality, or paying the same dollar amount, differs from equitable pricing; in fact, the ruse of equality masks global economic inequities. TRIPS has also prevented countries from developing generics for domestic use. While human rights advocates and many prominent voices in the medical community have called for a waiver to this IP provision of TRIPS in light of the COVID-19 global emergency, several European countries and the biggest pharmaceutical companies have rejected calls for such a waiver, including the UK, Switzerland, the EU, and Moderna (Lazare 2022a).

In 2021, US President Joe Biden expressed interest in pursuing a waiver, but little came from that avowed interest. However, in March 2022, a leaked text from the consortium of the EU, US, India, and South Africa revealed a compromise to address the IP barriers to accessing COVID-19 medicines and vaccines. The compromise was far from an IP waiver for pandemic medical tools (MSF 2022). According to the leaked text, the compromise only covered vaccines (not therapies and treatments), only covered "eligible members" who exported less than 10 percent of global COVID-19 vaccine exports (effectively excluding Brazil and China), and only covered patents, but no other IP barriers, such as trade secrets (Hassan et al. 2022).

The EU has been a staunch opponent of a potential IP waiver deal and has advocated for additional conditionalities to the existing WTO standards in order to water down any potential compromise of IP standards. As a result of the EU's participation in the negotiations, the leaked agreement would introduce new conditionalities. The compromise stated that an eligible member state could get a single authorization for multiple patents for the production of a generic COVID-19 vaccine, but it must list each of the patents covered, including each of the patented components of the vaccine. There are upwards of 280 components of mRNA vaccines, each of which is patented, and there are patents that are not even public, as new patents are filed every day (Lazare 2022a). 13 In other words, it is quite onerous and time consuming for someone to find each patent and determine its patent status within an

ever-changing patent landscape. These new obstacles undermine the ability of countries to avail themselves of Article 31 of the TRIPS Agreement, which allows WTO member countries exclusive patent rights before a patent has expired, and would allow them to produce generic versions of patentprotected drugs in cases of emergency. 14 This additional conditionality to Article 31 echoes the logics of conditionality that dominate IMF/WB and Euro-America's development agreements with low-income nations seeking aid. The EU has consistently demanded these conditionalities, which could impose indefinite waithood on African nations in line to get meaningful access to COVID-19 medical technologies.

Coloniality of Waithood

In the colonially-inflected geopolitical organization of capitalism across the world, the dominant market economies are mainly found in Europe and the US, and most of the low-income nations are former colonies in Africa and parts of Asia. Global capitalism also informs the economic relations that reflect the patterns of COVID-19 technology sharing (or lack thereof) between vaccine-rich nations and vaccine-deprived ones. As a response to efforts from India, South Africa, and others to remove barriers to generic drug production, Moderna, Pfizer, the EU, and the US, have stood behind IP and their own capitalist rationality. Even though drug companies create products that are important technologies that have saved countless lives, they are not motivated by social obligations or moral commitments. Rather, they are driven by the capitalist logic of self-interest (Edsforth 2012; Thambisetty 2021). Capitalist thinking purports that it is not sound economic policy for companies to give away to the poor heavily researched and financed products, risking protected trade secrets and patents, even if these technologies can save lives in a veritable disaster.

As the prices for COVID-19 vaccines remain variable around the globe, but with many poorer nations paying more per dose than wealthier ones, most low-income African countries have no option but to wait. The vaccinemakers gave steep discounts to the US and European countries after they struck deals with each other, while countries such as Uganda, South Africa, and Botswana paid more money per dose for the same drugs (Jimenez 2021). Purchasing these overpriced drugs at the scale needed to vaccinate entire populations is unsustainable for many of the weaker economies of the continent, and many Africans have not yet received vaccines as a result of the high prices. Pierre Bourdieu describes waiting as a way of experiencing the effects of power (Bourdieu 2000:228). This ultimately produces a feeling of powerlessness among marginalized groups within a society (Bi 2020). In this case, it is African nations that are the marginalized within the global community, which is dominated by Europe and the US.

Similar to Honwana's conceptualization of waithood, Artwell Nhemachena et al. argue that nations that were "dispossessed, exploited and disinherited without restitution are kept in threshold 'waithood' periods where there is uncertainty whether or not they are independent, whether or not they have sovereignty and autonomy and whether or not they have graduated out of the (neo)colonial strictures" (2018:4). The temporality of "colonizer is first" and "colonized is last" that waithood instantiates is indicative of the colonial rationale. It is this rationale that serves as justification for the protracted waiting period the (formerly) colonized must endure (Tiwari et al. 2020). Since colonialism, the global powers have conceptualized progress and development as temporal categories in which certain peoples belong to backwards, primitive stages of time and development compared to higher, more civilized groups. Many Western countries have relied on this conceptualization as justification for injustices and violences toward the marginalized in the present. These injustices include the sustained expropriation of capital from ravaged African economies under pandemic conditions by pharmaceutical companies, constituting a disregard for African lives in pursuit of profits.

Market participation and economic growth are important features of "developed" societies, and economists have declared that development aid to Africa has stunted and prevented the growth of African economies, resulting in debt traps (Moyo 2009). Contemporary views of the market society reveal that markets themselves are cultural phenomena and moral projects, ones that generate civilized behaviors such as cooperation, creativity, innovation, and even freedom (Fourcade & Healy 2007). The moral project that is the free market governs behaviors and ensures, not only moral participation, but that the rules and structures of play themselves are morally based, and deemed to be naturally "good." In other words, the epistemological foundation of "the market" confers a moral legitimacy to it. Such moral legitimacy frames the market as infallible, trustworthy, and just. Of course, the market ignores the conditions that generate the uneven outcomes market actors face, and in turn, perpetuates wealth inequality and the "winners and losers" tenet of capitalism. Thus, operating outside of market logics and constraints to receive goods normally distributed through market participation and activity may be construed as immoral. Put simply, the altruism and humanitarianism that African nations, low-income nations throughout the world, and this COVID-19 global emergency demand run counter to the rationalities of market economics. In relation to the principles of the market as a moral project, altruism and humanitarianism may be viewed as unjust and immoral.

The free market dictates that vaccines and other technologies be subject to supply and demand, and free and fair competition, irrespective of the humanitarian push for those projects to be made freely available. A perspective supporting Dambisa Moyo's pro-market and anti-aid arguments claims that the provision of medical care based on self-interest does a better job of providing benefits to others than altruism-based motivations (Rubin 2009). These critiques of aid suggest that neoliberalization (re: Moyo) and selfinterest over altruism are the best ways to deliver medical care (re: Rubin). However, these solutions ignore the historical and material violences

wrought by colonialism and the "free market" on the African continent. These calls for Africa to eschew development/pandemic aid while denying them access to drugs constitute a broader effort to make them subject to the market. These calls also signal attempts to fix Africa as a region for the capitalist expansion of often predatory corporations. For years, corporations have profited from expropriating materials and capital from Africa while rendering the continent subordinate and dependent via financial debt from investments, an example of economic neocolonialism (Uzoigwe 2019). The high prices of COVID-19 technologies have rendered Africa a collection of economically dependent states, ones that have depended on loans to help them secure vaccines during a pandemic that has killed millions (Lewis & Winning 2021). Because of these neocolonial conditions, African nations have weighed economic risk against saving lives, with devastating consequences to their economies in both the present and the future.

What Is Next in the Push for Equitable Vaccine Access?

Cost and Access

Not only do COVID-19 vaccines and treatments need to be made available, they need to be made affordable. The current COVID-19 vaccine inequities mirror the HIV antiretroviral therapy issues of the late twentieth and early twenty-first centuries, when Africans across the continent struggled to get HIV drugs because of exorbitant prices and TRIPS provisions that blocked developing nations from producing affordable generics (Haakonsson & Richey 2007; Peralta 2021). The back and forth between developing nations and wealthy ones has resulted in considerable gridlock on an agreement about an intellectual property waiver for COVID-19 vaccines.

During this two-plus-year standoff, millions of Africans have struggled to get their hands on affordable COVID-19 therapies as they wait for a solution to the apparent greed of the pharmaceutical giants, who have in many ways capitalized on the devastation of COVID-19. For example, Pfizer made USD37 billion in COVID-19 vaccine sales in 2021 and USD81.3 billion in total sales for 2021, representing more than double its profits from 2020. The smaller BioNTech pharmaceutical company brought in USD12.5 billion in the final quarter of 2021, for a total of USD36.8 billion for the year (Kollewe 2022). Throughout the pandemic, many scholars and medical practitioners have published research articles related to COVID-19 vaccine access in Africa and developing nations (Figueroa et al. 2021; Nachega et al. 2021). Many of them have advocated for equitable and timely access to vaccines, as COVAX ensures neither (Altindis 2022). They argue that global leaders have an ethical obligation "to avoid needless loss of life due to the foreseeable prospect of slow and inadequate access to supplies in Africa" (Kavanagh et al. 2020). The medical scientific community has overwhelmingly supported greater access to COVID-19 vaccines for the rest of the world and has urged America and Europe to recognize the importance of making

vaccines available to other countries. However, this has proven difficult, and much of the developing world has been made to wait for the West to decide to share much of its unused stockpiles of vaccines, and to even consider lifting IP protections that would allow countries to quickly generate their own versions of the vaccines. By early 2022, only around 540 million vaccine doses had reached Africa out of more than 9 billion doses in the global supply. By May 2022, Africa had administered over 570 million vaccine doses for a population of over 1 billion, with only about 17 percent of Africans fully vaccinated. 15 To put this in perspective, approximately 1 billion Africans have not received a single vaccine dose (Sidibé 2022), and experts estimate that Africa may only reach complete vaccination in 2023 (Padma 2021).

Alternative Approaches to Vaccine Access and Intellectual Property Rights

In a world that expresses virtuous beliefs such as "health is a human right," the same governance structures support health commodities and demand that everyone pay for this "right to health." This cruel reality has been especially devastating during the COVID-19 pandemic. However, experts such as Sharifah Sekalala et al. (2021) have argued that a decolonial approach to human rights and public health could address the systemic injustice represented by vaccine inequality. More specifically, they suggest that such a decolonial approach demands three things: 1) reparative justice, not through philanthropic vehicles such as COVAX, but through real wealth redistribution; 2) global efforts to increase vaccine capacity of the Global South; and 3) that states pay closer attention to the human rights responsibilities of corporations, including vaccine companies (Sekalala et al. 2021). Other experts have called for countries that have secured bilateral deals with pharmaceutical companies to donate portions of their vaccine doses to COVAX, and for clearer leadership to help mediate disagreements between countries that have obstructed the flow of vaccines to other nations (*The Lancet* 2021).

While less than 20 percent of the population of the African continent is fully vaccinated, researchers have identified over one hundred different pharmaceutical manufacturers across Asia, Latin America, and Africa that have the ability to produce generic versions of existing COVID-19 vaccines. However, these countries have struggled to do so because Moderna and Pfizer have refused to disclose trade secrets and have not supported an IP waiver (Lazare 2022b). China and South Africa have made some breakthroughs, though. In 2021, China donated many of its Sinopharm COVID-19 vaccine doses to countries across the Global South, including to Zimbabwe, Mozambique, and Namibia (Karásková & Blablová 2021). China distributed its vaccines to develop its national branding to the world, reinforce its preexisting soft-power programs, and to capitalize on new economic and geopolitical opportunities (Lee 2021). What remains unclear is how increased Chinese influence in Africa will shore up the continent's vaccine production. In 2022, a South African pharmaceutical company, Afrigen Biologics and Vaccines, reverse-engineered the Moderna mRNA COVID-19

vaccine (Johnson 2022). Afrigen was part of a hub of companies and researchers backed by the WHO to develop vaccines in the Global South and share those knowledges and technologies with other countries. While this signals a step forward in the push to increase vaccine access to millions of people worldwide, the outlook for the South African hub being a model of empowerment for low- and middle-income countries is dim. The WHO still makes most of the decisions for the hub, and the model may still face litigation from Moderna.

Some of these calls for decolonizing human rights via the improvement of vaccine manufacturing capacity in Africa also detail the importance of removing IP protections, which have resulted in unequal access to COVID-19 vaccines. Waiving IP alone may not decolonize inequitable global health structures, as ensuring affordable drug costs is crucial as well. However, waiving IP requirements, supporting the scaling up of vaccine manufacturing capacity on the continent, and establishing fair drug pricing are important steps in addressing the coloniality of global health and the state of vaccine production and distribution. Together, they represent important ways to reverse the colonial ordering and waithood that Africans have experienced regarding vaccine access that places them at the back of the queue.

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Notes

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- 2. Euro WHO press release, "One billion COVID-19 vaccine doses administered in the WHO European Region — but risks for the unvaccinated leave no room for https://www.euro.who.int/en/media-centre/sections/presscomplacency": releases/2021/one-billion-COVID-19-vaccine-doses-administered-in-the-whoeuropean-region-but-risks-for-the-unvaccinated-leave-no-room-for-compla
- 3. WHO COVID-19 Dashboard 2022: https://COVID19.who.int/table.
- 4. See Worldometer for Africa and Europe population: https://www.worldometers. info/world-population/africa-population/; https://www.worldometers.info/ world-population/europe-population/.
- 5. COVAX website: https://www.who.int/initiatives/act-accelerator/covax.
- 6. See BBC article: "Coronavirus: France racism row over doctors' Africa testing comments" https://www.bbc.com/news/world-europe-52151722.
- 7. Lopes, Carlos (@LopesInsights). 2021. "African countries have received less than 2% of the vaccines they have ordered, which already represents a fraction of the needs. This is what is meant by being at the end of the queue. @DevReimagined." Twitter. March 4, 2021, 10:46 p.m. https://twitter.com/LopesInsights/status/ 1367501664765284359?s=20.
- 8. For current statistics on COVID-19 vaccine dose distribution, see the UN COVID-19 Vaccine Market Dashboard: https://www.unicef.org/supply/COVID-19-vac cine-market-dashboard.
- 9. For explanation of compulsory licensing, see WTO website: https://www.wto. org/english/tratop_e/trips_e/public_health_faq_e.htm.

- 10. For reporting on how the US and European countries were buying up the global supply of vaccines and leaving Africa behind in 2021, see: McSweeney, Eoin, and Nyasha Chingono. 2021. "Western countries have 'hoarded' COVID vaccines. Africa is being left behind as case surge." CNN. https://www.cnn.com/2021/02/ 05/africa/vaccine-race-africa-intl/index.html.
- 11. IPR: intellectual property rights.
- 12. For list of AMC-eligible countries, see: GAVI The Vaccine Alliance website at https://www.gavi.org/news/media-room/92-low-middle-income-economies-eli gible-access-COVID-19-vaccines-gavi-covax-amc. South Africa and Botswana are self-financing countries.
- 13. For more insight into the growing mRNA virus patent landscape, see: Liu, Kunmeng, Zixuan Gu, Md Sahidul Islam, Thomas Scherngell, Xiangjun Kong, Jing Zhao, Xin Chen, and Yuanjia Hu. 2021. "Global landscape of patents related to human coronaviruses" (International journal of biological sciences 17 [6]: 1588). To read more on the history of mRNA vaccines, see: Dolgin, Elie. 2021. "The tangled history of mRNA vaccines" (Nature 597 [7876]: 318–24).
- 14. For more on TRIPS Article 31, see WTO website: https://www.wto.org/english/ docs_e/legal_e/27-trips_04c_e.htm.
- 15. Our World in Data: https://ourworldindata.org/explorers/coronavirus-dataexplorer?zoomToSelection=true&time=2020-03-01..latest&facet=none&picker Sort=asc&pickerMetric=location&Metric=Vaccine+doses&Interval=Cumula tive&Relative+to+Population=false&Color+by+test+positivity=false&country= USA~GBR~CAN~DEU~ITA~Africa; Africa CDC COVID-19 Dashboard: https:// africacdc.org/COVID-19-vaccination/.