Philosophy of Medicine
Original Research

The "Racial Contract" and the Racialization of Pathogens and Diseases

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Abstract

In this paper, I use the theoretical framework introduced by Charles W. Mills in *The Racial Contract* (1997) to examine certain practices of norming and racing space that Mills does not examine in his work—the norming and the racing of the nano-level, which is populated by pathogens. Specifically, I argue that this theoretical framework allows us to understand how pathogens, and the diseases that they cause, have been racialized throughout history. I focus on two historical cases that illustrate this: the yellow fever epidemics in the Americas (particularly in the US) in the eighteenth and nineteenth centuries, and the typhus epidemic that struck German-occupied territories in Poland and the *Ober Ost* during World War I. I then offer some final reflections.

1. Introduction

In his now-classic book, *The Racial Contract,* Charles W. Mills introduces what he calls the "Racial Contract" as "a rhetorical trope and theoretical method for understanding the inner logic of racial domination and how it structures the polities of the West and elsewhere" (1997, 6). Published in 1997, *The Racial Contract* was a major intervention in political philosophy. Written against the backdrop of the dominant tradition of social contract theory—particularly as represented in the work of John Rawls, whose *A Theory of Justice* (1971) had set the agenda for much of Anglo-American political philosophy in the second half of the twentieth century—Mills argued that the idealized, race-neutral framework of social contract theory systematically obscured the real historical foundations of modern Western nations. Where social contract theorists posited an idealized agreement among notional free and equal persons, Mills contended that what underlies modern Western polities is a racial contract: a historically documented set of agreements among white people—both explicit and tacit, as well as formal and informal—to structure society to their advantage at the expense of non-white peoples. By naming and analyzing this racial contract, Mills aimed to provide political philosophy with a more accurate account of how domination works, and to equip it with conceptual tools adequate to the task of understanding and challenging racial inequality. As Mills himself puts it: "This [method]

ISSN 2692-3963 | Date Received 20-11-2025 | Date Accepted 17-06-2026 | Date First Published 10-07-2026
Philosophy of Medicine | DOI 10.5195/pom.2026.269 | Volume 7 | Issue 1 | pp. 1–16

might be more revealing of the real character of the world we are living in, and the corresponding historical deficiencies of its normative theories and practices” (1997, 7). The book became enormously influential in philosophy and across the social sciences and humanities, inspiring extensive work on structural racism, the epistemology of ignorance, and the racial dimensions of political economy.

One of the central analytical moves in Mills’s work is his use of the Racial Contract as a tool to analyze practices focused on the norming and the racing of space. For Mills, space is one of the central domains where white supremacy aims to impose its normativity by delimiting “civilized” areas or regions from “barbaric” ones, and by depicting the latter as dangers that need to be “cordoned off” in virtue of posing threats of “contamination” vis-à-vis “civilized” spaces:

> Creating the civil and the political here thus requires an active spatial struggle against the savage and the barbaric, an advancing of the frontier against opposition, a Europeization of the world … Space must be normed and raced at the macrolevel (entire countries and continents), the local level (city neighborhoods) and ultimately, the microlevel of the body itself (the contaminated and contaminating carnal halo of the non-white body. (Mills 1997, 43–44)

Though I am in complete agreement with Mills regarding the appropriateness of the use of the Racial Contract to account for practices involving the norming and the racing of space, I believe that Mills’s framework can be used to explain the existence and deployment of practices that go beyond the areas he describes in the passage quoted above. In particular, the main thesis that I defend in this paper is that the norming and the racing of space goes beyond the individual body and that it impacts what might be called the “nano-level”—that is, the level of pathogens and diseases. According to this thesis, it is not only human bodies that are normed and raced, but also the infectious biological agents that produce disease, which are normed and raced in ways that cast them as requiring being “cordoned off” to prevent “contamination.” A second thesis that I defend here is that Mills’s Racial Contract enables us to explain how the norming and the racing of space at the nano-level occurs. Specifically, what I aim to show is that the norming and the racing of space at the nano-level is just an extension of the struggle that Mills describes against elements perceived as “savage” and “immoral” threats.

To argue for these two theses, I proceed as follows. In section 2, I offer a more detailed account of how Mills’s Racial Contract allows us to observe how white supremacy operates to both norm and race space, focusing on the epistemological and moral mechanisms it deploys to that effect. In section 3, I examine, using the Racial Contract as a lens, how certain epidemic diseases, and the pathogens that cause them, have been viewed throughout history by focusing on two examples: (1) the yellow fever epidemics in the Americas (particularly in the US) in the eighteenth and nineteenth centuries; and (2) the typhus epidemic that struck German-occupied territories in Poland and the *Ober Ost* during World War I. Finally, in section 4, I offer a conclusion with substantive final reflections that draw out the lessons yielded by these two case studies.

2. The Norming and the Racing of Space from the Perspective of the Racial Contract

Let me offer a more detailed account of how Mills's Racial Contract allows us to understand the norming and the racing of space. According to Mills, the Racial Contract enables us to understand how space, which is normally taken by white people as homogeneous and neutral, is in fact heterogeneous and value-laden in virtue of its being normed and raced in specific ways. To be specific, he makes it clear that, through the Racial Contract, we can see that space is normed and raced in a way that distinguishes two different kinds of areas with distinct characteristics. While certain regions or areas are characterized as conforming "a space in which we (we white people) are at home, a cozy domestic space," other regions or areas are characterized as conforming a domain where "space and its inhabitants are alien" (Mills 1997, 42). Thus, space and the different bodies that occupy it turn out to be divided and structured in different regions: Some of these regions are recognized as being ordered, civilized, and safe while others are perceived as being chaotic, wild, and potentially dangerous.

Using the Racial Contract, Mills observes that the norming and the racing of space, which create these different regions, occur in two different domains: an epistemic one and a moral one. In the epistemic domain, the norming and the racing of space occur by engaging in a process where "significant cultural achievement, intellectual progress is thus denied to those spaces, which are deemed (failing European intervention) to be permanently locked into a cognitive state of superstition and ignorance" (Mills 1997, 44). In the moral domain, the norming and the racing of space occur through a process wherein "vice and virtue are *spatialized,* first on the macro-level of moral cartography that accompanies the literal European mapping of the world, so that entire regions, countries, indeed continents, are invested with moral qualities" (1997, 46). *Norming,* in this context, refers to the process by which particular standards of social order, knowledge, hygiene, and moral conduct—standards rooted in European and specifically white bourgeois norms—are projected onto space and its inhabitants, designating some spaces and peoples as meeting those standards while consigning others to the status of deviant, dangerous, or inferior. The norming of space thus always works in tandem with its racing: To race a space is to mark it and its inhabitants as non-white and thereby outside the norm, while to norm a space is simultaneously to inscribe it with the racial hierarchy that the Racial Contract sustains. As Mills's work shows, the two processes are analytically distinct but practically inseparable.

The racing and the norming of space in these two different domains take place through various mechanisms. For instance, the racing and the norming in the epistemic domain can occur through the physical destruction of books and of other cultural artifacts of non-white peoples—consider, for example, the systematic burning of Mexica codices after the fall of Tenochtitlan, which was part of a broader campaign to eradicate indigenous intellectual and spiritual traditions; the destruction of Mexica temples and palaces undertaken by Spaniards; and the repurposing of construction materials to build Christian churches and other colonial buildings (see, for example, Kobayashi 1974; Boone 1987; Carreón Blaine 2020). In the moral domain, the norming and the racing of space can occur through the representation of non-white spaces or objects in a negative way—for example, the depiction of dragons or sea monsters as inhabiting certain landmasses or oceans on various maps.

In addition, the deployment of language is often used to norm and race space in certain specific ways at both levels. For instance, in some cases whole regions or areas are renamed

with signifiers that suggest they are extensions of Europe—for example, the names of the different Mesoamerican polities were systematically discarded after the Spanish conquest, and their territories were collectively renamed "New Spain." In other cases, certain names or descriptors (for example, "*hic sunt leones*") were used to characterize whole regions or areas as populated by wild beasts and devoid of (white) human life. And, considering that the use of language is an ongoing process among human communities, this shows clearly, as Mills puts it, that "the battle against this savagery is in a sense permanent as long as the savages continue to exist, contaminating (and being contaminated) by the non-Europeanized space around them" (1997, 47). This is something that can be seen clearly nowadays in the current policies of the Chilean government within the historical Araucanía region, which have been developed in response to the resistance of the Mapuche to the theft and the exploitation of their ancestral homelands—policies that involve the ongoing militarization of the region and the labeling and treatment of Mapuche activists as "terrorists."[1]

Having looked at some examples of how the norming and the racing of space occur at the higher levels (for example, macro, local, and micro), in the next section I examine how space is normed and raced at the nano-level by considering the racialization of pathogens. It is important to note at the outset that the extension of Mills's framework to the nano-level is not merely an analogy or a metaphor. The nano-level—the domain of pathogens such as bacteria, viruses, fungi, and other biological agents of disease—is a domain of space in the relevant sense: It is a space that *can be* normed and raced because it *has been* normed and raced, as the two historical case studies that follow will demonstrate. The body itself, in Mills's account, is already theorized as a spatial domain subject to racialization, which I understand in this context as the outcome of the joint processes of norming and racing the space. The resulting racialization of the nano-level simply extends this logic one step further—to the microbial inhabitants of those bodies and to the diseases they produce. As will become clear, the mechanisms through which the nano-level is normed and raced—epistemological denial, moral spatialization, and the deployment of racializing language—are continuous with those that Mills identifies at larger scales.

3. The Norming and the Racing of Pathogens: Two Historical Case Studies

In this section, I examine two historical case studies that showcase how pathogens and the diseases that they cause have been normed and raced throughout history—which are processes that result in the racialization of the nano-level—and I show how the norming and the racing of space at this level can be explained through Mills's Racial Contract.

3.1 Yellow Fever Epidemics in the Americas

The first case I consider is the yellow fever epidemics in the Americas and, particularly, in the US. As various virologists and epidemiologists have pointed out (for example, Bryant et al. 2007; Chippaux and Chippaux 2018), the virus that causes yellow fever, which belongs to the genus *Flavivirus*—a genus that also encompasses the West Nile and Zika viruses—

[1] For more details on the characterization of Mapuche resistance activities as "terrorism," see Bialostozky (2008), Richards (2010), and Crow (2014).

most likely was introduced to the Americas by Europeans as a result of the Atlantic slave trade that began in the early sixteenth century. This led to the occurrence of a series of yellow fever epidemics that usually emerged in coastal cities with large ports located in the Caribbean and the Atlantic, such as Cartagena, Santo Domingo, Havana, Salvador, Kingston, New Orleans, and Charleston, and then spread to other locations via rivers and other trade routes.[2]

Coastal cities were particularly fertile grounds for the emergence of yellow fever epidemics in virtue of a confluence of factors: Not only were they all important markets for African slaves, as well as ports of entry for European settlers, but their inhabitants often lived in very close proximity to each other without access to sewerage or sanitation and the wharves, warehouses, and back alleys of these cities were typically filled with discarded containers and potholes where surface runoff pooled, transforming them into perfect breeding grounds for mosquitoes.

Historians of medicine such as Rana Hogarth (2017, 21) have remarked that, in virtue of the fact that the yellow fever virus first emerged as a zoonosis in Africa and that some African men and women who ended up enslaved and shipped across the Atlantic probably had been exposed to the virus as children,

> black populations that arrived in American port cities in the eighteenth century were indeed strangers to the land, but not to the fever. It is likely that black populations observed to be immune from the fever may very well have acquired that immunity, particularly if they acquired it as children and then arrived in the Americas as adult "saltwater" slaves from Western Africa.

Indeed, in a way parallel to chickenpox, yellow fever tends to be less severe in children than in adults, and exposure to the disease after a mild infection offers lifelong immunity.[3] Though this holds true regardless of one's race or lineage, the fact that both Indigenous populations and white European settlers in the Americas (who typically had had no prior exposure to the yellow fever virus) were decimated by the disease in numbers greater than those of African slaves led physicians progressively to maintain that "as a race, black people were innately immune to yellow fever" (Hogarth 2017, 18).

To illustrate this in the case of the US, let us consider one of the most influential descriptions of yellow fever, which is the account penned by the physician John Lining about the 1748 epidemic that ravaged Charleston. In this account, written as a letter addressed to Dr. Whytt at the University of Edinburgh in 1754 and published in 1799, Lining characterizes the susceptibility of different groups in Charleston to the disease in the following terms:

[2] For instance, in the case of Colombia, the physician and epidemiologist Augusto Gast Galvis (1958) showed that, as recently as the mid-twentieth century, most of the yellow fever cases in Colombia occurred in localities situated along the Magdalena River, which is still the main waterway from the Colombian Caribbean coast to the Colombian highlands in the Andes.

[3] On this issue, Espinosa (2014, 445) writes: "Yellow fever, however, presents extremely mild symptoms in children. In contrast to the staggering harm that the virus does among adult victims, cases in children are very rarely fatal and often go unnoticed among the mundane sniffles, fever and colds of childhood, and anyone who survives the illness thereafter enjoys a complete and lifelong immunity."

> The subjects that were susceptible of this fever were both sexes of the white color, especially strangers arrived from cold climates, Indians, Mistees, Mulattoes of all ages, excepting young children and those only such as had formerly escaped the infection … There is something very singular in the constitution of the Negroes, which renders them not liable to this fever, for though many of these were exposed as much as the nurses to the infection, yet I never knew one instance of this fever amongst them. (Lining 1799, 7)

As Hogarth observes, through this description, Lining clearly turns Blackness into a medical feature that provided individuals who possessed it with immunity to yellow fever and whose absence or dilution (in the case of mixed-race people) led to an increased susceptibility to the disease. And, though Lining never provides an account of how Blackness is supposed to provide immunity to the disease, this claim was subsequently reproduced by others, who often clung to a softened version of it even in the presence of countervailing evidence. For instance, in his account of the devastating 1793 yellow fever epidemic that struck Philadelphia, the economist and publisher Matthew Carey conceded, after citing Lining’s opinion, that not all Black people were naturally immune to the disease, but he immediately qualified that concession by pointing out that Black people were felled by the disease in lesser numbers and that those who were struck and survived recovered more swiftly than others:

> The same idea [Black immunity] prevailed for a considerable time in Philadelphia; but it was erroneous. They did not escape the disorder; however, the number of them that were seized with it was not great; and, as I was informed by an eminent doctor, “it yielded to the power of medicine more easily than in the whites.” (Carey 1793, 78)

Moreover, besides reproducing in a softened fashion previous claims about Black immunity to yellow fever (now couched in terms of decreased susceptibility to the disease), Carey links this feature to a vicious moral character exhibited by Black people. Specifically, he points out that free Black nurses, who were “immune” to the disease, and had been organized in Philadelphia by Black community leaders and abolitionists Absalom Jones and Richard Allen to help care for the sick, ruthlessly exploited and even robbed white patients:

> The great demand for nurses afforded an opportunity for imposition, which was eagerly seized by the vilest of the blacks. They extorted two, three, four and even five dollars a night for attendance, which would have been well paid by a single dollar. Some of them were detected in plundering the houses of the sick. (Carey 1793, 77)

This passage is particularly interesting because it showcases how vice is both racialized and spatialized to the extent that wickedness—which is manifested in the exploiting and robbing of sick white patients—becomes a feature of Black people because of their lessened susceptibility to the disease. Indeed, Carey suggests here that a central aspect of the disease—namely, the decreased susceptibility to it that Black people have qua Black—is linked with vicious character in a way that erases the service and care provided by Black nurses. Carey’s attempt to link Black immunity or decreased susceptibility to the disease to wickedness was so egregious that in 1794 Jones and Allen penned a strong rebuttal, in which

they responded that Carey's argument rested on turning a blind eye to the behavior of many white people during the epidemic:

> That there were some few black people guilty of plundering the distressed, we acknowledge; but in that they only are pointed out, and made mention of, we esteem partial and injurious; we know as many whites who were guilty of it; but this is looked over, while the blacks are held up to censure. Is it a greater crime for a black to pilfer than for a white to privateer? (Jones and Allen 1794, 8)

Though Jones and Allen attempted to break the association that Carey established between Black immunity (or decreased susceptibility) to yellow fever and vicious character, as well as to dispel the persistent belief that Black people were naturally less susceptible to the disease than others, both the belief and the association persisted during the last decade of the eighteenth century and endured well into the twentieth century. For instance, even after recognizing that Black people also were sickened and killed by yellow fever during the 1793 Philadelphia epidemic (in fact, Allen almost died from it), the illustrious physician Benjamin Rush pointed out in his account of the epidemic that the disease was less virulent in Black people since no Black patient progressed to the last stage of the disease (that is, general hemorrhage) that almost always preceded death:

> They took the disease, in common with the white people, and many of them died with it. I think I observed the greatest number of them to sicken after the mornings and evenings became cool. A large number of them were my patients. The disease was lighter in them than in white people. I met no case of hemorrhage in a black patient. (Rush 1794, 97)

As Mariola Espinosa (2014, 442) has remarked, Rush's contradictory remarks in this passage helped perpetuate in a softened form the idea that Black people were immune (or, at least, less susceptible) to yellow fever well into the twentieth century, when various historians (for example, Kiple and Kiple 1977; Patterson 1992) reproduced and endorsed claims concerning Black immunity or decreased susceptibility to yellow fever. Moreover, the association between Black immunity or decreased susceptibility to the disease and viciousness that Carey had put forth in his account of the 1793 Philadelphia epidemic persisted in more covert ways. Following Carey's suggestion, some influential nineteenth-century US physicians, such as Josiah Nott, maintained that, while Black ancestry provided people with significant resistance and even immunity to yellow fever, it also made them intellectually and morally inferior to others (in particular, to whites), thus linking Black immunity or decreased susceptibility to yellow fever to inferior moral character:

> A small trace of white blood in the negro improves him in intelligence and morality, and an equally small trace of negro blood, as in the quadroon, will protect such individual against the deadly influence of climates which the pure white man cannot endure. For instance, if the population of New England, Germany, France or England, or other northern climates comes to Mobile or New Orleans, a large proportion dies of yellow fever … On the contrary, negroes, under all circumstances, enjoy an almost perfect exemption from this disease, even though brought in from our northern states; and what

> is still more remarkable, mulattoes … are almost equally exempt. (Nott and Gliddon 1854, 68)

What is remarkable is that, even if Nott and other physicians associated Black immunity to yellow fever with decreased morality, when white people gained immunity through exposure to the disease (that is, when they got “acclimated”) in cities like New Orleans, this immunity was seen not only as an advantage that opened for them opportunities for enrichment—considering that “acclimated” workers were in high demand—but also as a reward for their supposedly high moral fiber. Kathryn Olivarius, who maintains that white immunity was considered as an economic asset in antebellum New Orleans—referring to it as a form of “immunocapital” (2022, 21) that only whites could enjoy—persuasively argues that white immunity was treated quite differently to Black immunity since it was associated with virtue and grit. The contrast is noteworthy: Whereas Nott linked Black immunity to moral and intellectual degradation (explicitly to diminished “intelligence and morality”),[4] white immunity was framed as the product of providential election and individual virtue. This asymmetry illustrates with great clarity how the moral norming and the racing of space extended to the nano-level: The same biological phenomenon—immunity to a disease—was given diametrically opposed moral valences depending on the race of its bearer, as Olivarius remarks: “Successful acclimations factored into the genesis stories of almost all of New Orleans’s political and economic elite. Men claimed that their triumph over the disease was a product of providential selection, manliness, morality, sobriety and honor, making death a mark of damnation rather than luck” (2022, 25).

To illustrate this, Olivarius examines in detail the case of Vincent Nolte, a German immigrant who, in the first two decades of the nineteenth century, became one of the wealthiest cotton traders in New Orleans, showing that his economic and social success was in good measure due to his contracting and surviving yellow fever in 1806. But his immunity not only provided him with financial and social opportunities. Olivarius (2022, 116) also remarks that, in his autobiography, Nolte characterized his acquired immunity to yellow fever as a reward granted by Providence due to his grit and entrepreneurship.[5]

Considering all these data, we can conclude that US physicians and other members of US white elites were, during the eighteenth and nineteenth centuries, engaged in processes of norming and racing space at the nano-level in the case of yellow fever. This is made patent by the long persistence of the belief in natural Black immunity or decreased susceptibility to yellow fever among physicians and scholars, even in the presence of massive amounts of countervailing evidence. Moreover, by relying on Mills’s Racial Contract, we can also understand precisely how that happened. Specifically, even if people were still ignorant about the specific role of pathogens in the transmission of yellow fever and the emergence of antibodies as part of the development of immunity, this process of norming and racing involved spatializing vice and virtue at the nano-level by associating, as Carey and Nott did, Black immunity to yellow fever—which was deemed natural—with wickedness, and white immunity—which was acquired by “acclimation”—with virtue. Indeed, the assertions of Carey and Nott showcase remarkably well how the Racial Contract operated in the moral

[4] Specifically, the idea that racial heritage influences intelligence—which we find in Nott—persisted well into the late twentieth century and reasserted itself in this decade of the twenty-first century. For a clear exposition of this, see Levin (1997).

[5] Vincent Nolte (1854, 91): “My reply was that I did not feel at all like dying and that I would not die.”

domain by stressing that Black immunity and Black moral inferiority went naturally hand in hand, while white immunity and white moral virtue were also tightly linked.

Having examined the case of yellow fever, let me turn now to the second historical case study.

3.2 Typhus Epidemic During World War I

The second case study revolves around the epidemic of typhus that struck German-occupied territories in Poland and the *Ober Ost* during World War I. Prior to the *Grande Guerre,* typhus had been an endemic disease in several parts of the world, particularly in Eastern Europe, where it had caused epidemics at various points in history marked by war and many of its concomitant features (massive army movements, overcrowding of soldiers in bivouac shelters or prison camps, poor hygiene conditions due to lack of sanitation, and so on). For instance, Napoleon's *Grande Armée* had been decimated in 1812 and 1813 during the French invasion of Russia and the German campaign, not only by the frigid weather and the constant attacks undertaken by Cossacks, but also by typhus, which killed a large proportion of French and allied soldiers.[6] As a result, German war planners in 1914 were particularly concerned by the Russian invasion of Prussia since they feared that Russian troops attempting to take Prussia might not only cause physical destruction and death in the eastern provinces of the German Empire but also bring disease, which could then spread to the west of Germany.

These fears were exacerbated when some Russian prisoners of war (POWs) held in German prison camps, who had been captured at the battles of Tannenberg and the Masurian Lakes, began to exhibit symptoms of typhus. This outbreak put German military and medical authorities in a quandary because, on the one hand, the mobilization of hundreds of thousands of German reservists to fight a two-front war entailed that POW labor was required to address critical manpower shortages in a wartime economy but, on the other hand, deploying Russian POWs in German factories and fields risked extending typhus to the civilian population due to interaction between POWs and civilians.

To address this problem, some of the best parasitologists and pathologists affiliated with the Institut für Schiffs- und Tropenkrankheiten in Hamburg—in particular, Stanislaus von Prowazek and Henrique da Rocha Lima—were dispatched to Cottbus to study typhus in a camp for Russian POWs. Indeed, though the French physician Charles Nicolle had identified the human louse as the main transmission vector for typhus in 1909, scientists were still ignorant about the specific pathogen that caused the disease. Though Prowazek and Rocha Lima both contracted typhus and Prowazek died from it (along with other German pathologists and infectiologists in 1915), Rocha Lima succeeded in identifying the bacterium responsible for typhus in 1916—which he named *Rickettsia prowazekii* to honor his deceased colleague.

In parallel fashion to these medical tragedies and successes, Germany's military fortunes on the eastern front improved tremendously after the initial 1914 Russian invasion of Prussia and, by 1917, German troops and their Austro-Hungarian allies had been able to rout several Russian armies and occupy a very substantial portion of the Russian Empire,

[6] There is abundant literature on the havoc brought by typhus upon French imperial troops in the 1812 and 1813 campaigns of Russia and Germany. For references to primary sources, see Talty (2009) and Ducoulombier (2014).

which encompassed Poland, Belarus, the Baltic states, and western Ukraine. These war successes gave rise to a harsh military administration of the territories occupied, which were divided into southern Poland (occupied by the Austro-Hungarians) and two German-occupied territories: the General Government of Warsaw and the *Ober Ost*. During this occupation, one of the primary concerns of German military officials was to prevent the spread of typhus. To accomplish this, civilian populations were subject to ongoing monitoring for outbreaks of the disease and, specifically, Jews were targeted most since they lived concentrated in restricted spaces and were already associated with parasitic infestations and disease by Germans. This was because, even before the war, some prominent German intellectuals, such as Paul de Lagarde, had connected Jews closely with vermin and pathogens:

> It takes a heart as hard as crocodile's skin not to feel sorry for the poor, exhausted Germans and—which is the same thing—not to hate and despise the Jews or those who, out of humanity, speak for those Jews or who are too cowardly to crush these watchful vermin [*Ungeziefer*]. One does not negotiate with trichinae and bacilli; trichinae and bacilli are not chosen to be educated, they are to be exterminated as quickly and as thoroughly as possible.[7] (Lagarde 1887, 339)

This passage is remarkable not only for its virulence but also for its deployment of the pathogen metaphor as an instrument of racialization. When Lagarde writes that "trichinae and bacilli are not chosen to be educated, they are to be exterminated," he is doing something philosophically significant: He is denying to Jews the very capacity for education and moral development that grounds membership in the human moral community. The personification of Jews as pathogens—as organisms incapable of being educated, only of being exterminated—is a paradigmatic instance of the norming and racing of space at the nano-level. By classifying Jews alongside trichinae and bacilli, Lagarde is simultaneously assigning them a position in the racialized taxonomy of space—below the threshold of the moral domain—and prescribing the appropriate response: not education or reform, but extermination.[8] This move illustrates with particular force how the norming and the racing of the nano-level operates not merely descriptively but normatively, with lethal consequences.

Given the already existing association between Jews and both vermin and pathogens, it was a small step for German medical and military officials in the context of World War I to link Jews with lice and typhus. In fact, as Paul J. Weindling notices, typhus became known to German officials in occupied Poland and the *Ober Ost* as "a *Judenfieber* [Jew fever], because of its very high degree of incidence among the Jewish population (95 per cent of all

[7] In the original: "*Es gehört ein Herz von der Härte der Krokodilhaut dazu, um mit den armen ausgesogenen Deutschen nicht Mitleid zu empfinden, und—was dasselbe ist—um die Juden nicht zu hassen, um diejenigen nicht zu hassen und zu verrachten; die—aus Humanität!—diesen Juden das Wort reden, oder die zu feige sind; dies zuchernde Ungeziefer zu zurtreten. Mit Trichinen und Bacillen wird nicht verhandelt, Trichinen und Bacillen werden auch nicht erzogen sie werden so rasch und so gründlich wie möglich vernichtet.*"

[8] In fact, the classification of Jews as trichinae and bacilli has had other effects well beyond the end of World War II since it has served, for anti-Semites and Nazi sympathizers and former collaborators, as a way deny that the Holocaust ever happened. For instance, in 1978, the former French Vichy civil servant and unrepentant Nazi collaborator Louis Darquier de Pellepoix—who had sought refuge in Franco's Spain after the end of the war—gave an interview to the French weekly magazine *L'Express* (1978, 164), where he emphatically asserted: "*À Auschwitz on n'a gazé que les poux*" (Only lice were gassed at Auschwitz).

cases in 1915–1916), even though Jewish mortality rates were lower" (2000, 104). This high level of incidence was due to at least two main factors. First, Jewish populations were often forced to live within impoverished and crammed spaces in occupied cities such as Warsaw and Lublin, a fact that made hygiene challenging, as Polly Zavadivker (2020, 106) stresses: "Widespread poverty and overcrowded dwellings made bathing and laundering difficult to begin with; wartime inflation, soap shortages and breakdowns in garbage removal only exacerbated the challenge." Second, even if German authorities had installed several delousing centers, Jews were often marched forcefully to these centers to be stripped naked, shaved, and sprayed with some disinfectant, and these delousing campaigns were often accompanied with the closure of synagogues, yeshivas and Jewish businesses. In addition, people who showed signs of infection were sent to "hospitals," where they were housed in cramped conditions with other sick people, and often just left to die in isolation. Because of this, as Weindling (2000, 102) emphasizes, "communities often perceived delousing as collective punishment," which led to some acts of resistance against Germans and delousing centers.[9]

What is particularly important to observe is that the connection between moral Jewish inferiority and lice and typhus that German officials established can be explained if we appeal to Mills's Racial Contract. Indeed, we can see that, just as vice was spatialized in the case of Black people in the US by people like Carey and Nott, vice was also spatialized in Germany to the extent that Jews were viewed as immoral profiteers who flourished amid the misery of others caused by chaos, as Lagarde (1887, 350) writes: "Wherever there is financial distress, especially where there is financial distress as a result of imperfect political conditions, the Jew thrives on the ruins of the nation."[10] Keeping in mind that Germany was in economic and financial distress in 1917—and even more so in 1918—due to the British naval blockade and the war effort, which created shortages of foodstuffs and other basic goods, it is then not particularly surprising that the German government issued a decree in April 1918 forbidding the entry of Jews from Poland and the *Ober Ost* into Germany, which reads as follows in a passage cited by the historian Jan Rybak:

> A special hazard derives from the entire population's ineradicable uncleanliness in regard to matters of health. For a great part lice-ridden, the Polish-Jewish workers are particularly likely transmitters of typhus and other infectious diseases. The hazard comes to an increased degree from the recently imported Jewish-Polish workers from the *Generalgouvernment*, where the spread of typhus has recently reached a hitherto unknown scope especially amongst the Jewish population. (Rybak 2022, 463)

Though the decree justified the denial of entry to Germany to Polish-Jewish workers on the basis that they might carry lice and could potentially transmit typhus to others, the language deployed in the first sentence, which references the "ineradicable uncleanliness" of the entire Polish-Jewish population, suggests that the "special hazard" was not just the spread of lice and typhus. After all, there was a strong demand for labor in Germany and Polish-

[9] In particular, Weindling (2014, 49) notes: "As German delousing measures became more coercive, Jewish evasion increased. Jews continued to resist delousing during the epidemics of 1919–21, for they associated the shaving of hair with bodily assault during pogroms, when beards and sidelocks were removed by force."
[10] In the original: "*Überall wo es Finanznoth, besonders da, wo es ist in Folge unfertiger politischer Verhältnisse Finanznoth gibt, gedeiht auf der Ruine der Nationen der Jude.*"

Jewish workers could be submitted to very thorough delousing and quarantined until the threat of infection had passed. Rather, the "special hazard" seemed to be moral in nature since Jews could not only sicken the bodies of Germans but also corrupt the soul of the nation since they were viewed as vermin that thrived on ruins, as Lagarde had suggested.

And, as Rybak (2022, 482) also mentions, the fact that the primary hazard was not medical but rather moral was conceded discreetly by some German officials, who held in their correspondence that Polish-Jewish workers comprised "an especially high number of morally inferior elements." Thus, we can see clearly how the Racial Contract operated in the moral domain to link Jewish lice-infested bodies and typhus-proneness—which were deliberately manufactured by the Germans themselves in virtue of the wartime conditions that they had forced upon Jewish communities—to alleged Jewish moral inferiority and malice in the German-occupied Polish and *Ober Ost* territories in World War I.

Having considered in detail these two historical case studies, I turn to offer a conclusion with substantive final reflections.

4. Conclusion and Final Reflections

I have argued here that Mills's Racial Contract enables us to explain practices resulting in the racialization of space at the nano-level, and thus to account for the process of norming and racing of different pathogens and the diseases they cause, by examining two historical case studies: yellow fever in the US in the eighteenth and nineteenth centuries and typhus in the German-occupied territories of Poland and the *Ober Ost* during World War I. In this conclusion, I want to draw out in more substantive fashion some of the broader lessons that these two case studies yield, both for our understanding of Mills's framework and for the philosophy of medicine more generally.

The first and most general lesson is that the norming and the racing of space are not processes that terminate at the surface of the body. Mills himself identifies the microlevel of the body—"the contaminated and contaminating carnal halo of the non-white body" (1997, 44)—as the innermost frontier of racial spatialization. The two case studies examined here suggest that this frontier extends further still, to the nano-level of disease epidemiology: to the pathogens that infect and inhabit bodies, the immunological responses and the medical histories that shape susceptibility, and the epidemiological patterns that emerge from the intersection of biological and social conditions. What yellow fever and typhus both demonstrate is that the biological facts of disease—who gets sick, who is immune, who survives, and who dies—do not exist in a politically neutral domain. They are interpreted, narrated, and institutionally acted upon within frameworks already saturated with racial meaning. The epidemiology of disease is thus not merely a medical fact but also a social and political one. Mills's framework gives us the analytical tools to see precisely why.

The second lesson concerns the relationship between the epistemic and moral dimensions of racial spatialization at the nano-level. Mills identifies both an epistemic and a moral domain in which the norming and the racing processes operate, and the case studies illustrate how these two domains interact in the specific context of infectious disease. In both the yellow fever and the typhus cases, the epistemic domain operated by systematically misrepresenting biological facts—constructing, in the face of substantial countervailing evidence, narratives of natural Black immunity and Jewish lice-proneness that reflected

racial ideology, rather than epidemiological reality. The moral domain operated by attaching moral significance to these misrepresented biological facts: Black immunity became a sign of moral inferiority and exploitative character; Jewish lice-proneness became a sign of ineradicable uncleanliness and moral corruption. The intersection of these two operations is what makes the resulting racialization of disease stubbornly persistent and particularly difficult to challenge: The epistemic errors are stabilized by the moral framework in which they are embedded, and the moral judgments are laundered through their apparent grounding on biological facts.

The third lesson concerns the distinctive contribution that disease epidemiology makes to our understanding of Mills's account of space. Mills's framework operates across multiple spatial scales—macro, local, and micro—and the two case studies show how the nano-level articulates with these larger scales in illuminating ways. The racialization of yellow fever in eighteenth- and nineteenth-century US cities like Philadelphia or New Orleans—coastal ports with specific demographic compositions, economic functions, and sanitary conditions—cannot be understood without attending to the local scale of the urban city: It is the city that serves as the crucible in which racial hierarchies, labor arrangements, disease exposure, and immunological histories intersect to produce the conditions for both epidemic disease and its racialized interpretation. Similarly, the racialization of typhus in German-occupied Poland and the *Ober Ost* cannot be understood without attending to the war zone as a specific spatial formation: a space structured by military occupation, forced confinement, and deliberate deprivation that simultaneously produced the idoneous material conditions for typhus transmission and supplied the ideological framework for its racial interpretation. Disease epidemiology thus gives Mills's understanding of space new content and new specificity: It shows how the norming and the racing of space at larger scales creates the material conditions for the norming and the racing of space at the nano-level, and how the resulting nano-level racialization in turn reinforces the norming and the racing processes at larger scales in a kind of positive feedback loop.

A fourth lesson concerns the reflexive dimension of the racialization of disease. In both case studies, the conditions that were held to demonstrate the racial characteristics of the racialized group—Black immunity, Jewish lice-proneness—were in significant measure produced by the very racial arrangements that the racial interpretation was designed to justify. Many enslaved Black people in the Americas were immune to yellow fever because, prior to their forced relocation imposed by the Atlantic slave trade, they had been exposed to the virus as children. Jewish communities in occupied Poland and the *Ober Ost* were exposed to lice and typhus because German military occupation had confined them in impoverished and overcrowded conditions. The racial interpretation of these facts thus operated to naturalize what was in fact socially produced, making the consequences of racial domination appear as its justification. This reflexive structure—in which racial domination produces the conditions that are then cited to legitimate further racial domination—is precisely what Mills means by the capacity of the Racial Contract to sustain itself through the epistemology of ignorance: the systematic misrepresentation of social facts as natural ones.

These observations raise a further question: can Mills's Racial Contract be used not only as an explanatory tool to describe how the norming and the racing of the nano-level has occurred, but also as a critical tool to push back against it? The historical record suggests that this is not merely a theoretical possibility. The rebuttals by Jones and Allen against

Carey's racialization of yellow fever immunity, the epidemiological work that eventually undermined claims of natural Black immunity to yellow fever, and the resistance of Jewish communities to forced German delousing campaigns are all examples of what a counter-politics of the racial contract might look like at the nano-level. Understanding how the twin processes of norming and racing of the nano-level operate enables us to examine carefully what often seem to be innocuous or even beneficial public health policies—such as a mandatory delousing campaign—or neutral epidemiological observations in order to challenge the assumptions underpinning those policies or observations.

The contemporary relevance of this framework is not hypothetical. The racialization of the 2013–2016 Ebola outbreak in West Africa, in which representations of the epidemic consistently pitted a "primitive" Africa against the "civilized" Western world, and the racialization of Covid-19 through the rhetoric of the "China virus" and the "Kung flu" that was used and promoted by then US president Donald Trump and the subsequent widespread targeting of Asian communities in political and social discourse, are both phenomena to which the analytical framework developed here applies directly.[11] The joint processes of norming and racing of the nano-level that result in the racialization of pathogens are not historical curiosities; they are ongoing features of how racial domination operates in and through the domain of public health. Understanding this requires precisely the kind of integrated framework—one that connects the philosophy of race with the epidemiology of disease—that Mills's Racial Contract makes available.

Acknowledgments

A conversation with Charles Mills at an American Philosophical Association (APA) reception in 2017 provided the original inspiration and motivation to write this article. I dedicate it to his memory. An earlier version was presented at the Philosophy Born of Struggle (PBOS) conference in 2022, which was hosted by Texas State University and took place virtually. For thoughtful comments and suggestions on that occasion, as well as patience and understanding—particularly considering that I presented the paper when I was infected with Covid-19 and experiencing mild to moderate symptoms, I thank Stephanie Rivera Berruz, Jacoby Carter, Reyes Espinosa, Leonard Harris, Lee McBride III, and Russell Moses, as well as the other participants of the virtual audience. I am also grateful to two anonymous readers who provided excellent recommendations that greatly improved the manuscript. Finally, I wish to thank my family—particularly my children, Aurelia, Mikaela, and Sergio Jr., my mother Martha and my sister Paulina—for their love and support.

Disclosure Statement

No competing interest was reported by the author.

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[11] I am grateful to a reviewer for stressing this point to me in an anonymous review.

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