

# Hygienic Determinism, Cultural Essentialism, and Public Health in Ecuador and Guatemala, 1900-1950

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## Abstract

In Guatemala and Ecuador—two nations with large Indigenous populations—public health professionals and government officials attributed high incidences of infectious disease among *indígenas* (Indigenous people) to culture and customs rather than to structural determinants of abject poverty. Race played as much of a role as medical science in shaping how public health officials approached infectious-contagious diseases and the *indígenas* who contracted them in the first half of the twentieth century. To disparage *indígenas* and undermine their claims to citizenship, Guatemalan and Ecuadorian public health officials deployed cultural essentialism and hygienic determinism, by which I mean efforts to portray marginalized populations, particularly their practices and habits, as sources and propagators of diseases that compromise public health and ravage those same marginalized populations.

**Keywords:** Guatemala; Ecuador; Indigenous people; disease; hygienic determinism

## Resumen

En Guatemala y Ecuador, dos países con poblaciones indígenas numerosas, tanto los profesionales de salud pública como los funcionarios del gobierno consideraron que la alta incidencia de enfermedades infecciosas entre la población indígena provenía más de su cultura y sus costumbres que de factores estructurales como la pobreza aguda durante la primera mitad del siglo XX. El papel de la raza fue tan importante como el de la ciencia médica

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en formar cómo los funcionarios entendieron y trataron las enfermedades infecciosas y contagiosas y a los indígenas enfermos

éstas. Para menospreciar a la población indígena y deslegitimar sus demandas de ciudadanía, los oficiales de salud pública en ambos países desplegaron el esencialismo cultural y el determinismo higiénico. Esta última expresión alude a sus esfuerzos para retratar poblaciones marginadas, especialmente sus prácticas y hábitos, como fuentes y diseminadoras de enfermedades que ponían en peligro la salud pública y diezaban a estas mismas poblaciones marginadas.

**Palabras clave:** Guatemala; Ecuador; indígenas; enfermedades; determinismo higiénico

In 1943, the director of the campaign against bubonic plague in Ecuador, Cornelio Sáenz Vera, characterized *indígenas* (Indigenous people) as “a population completely lacking in the most elemental norms of hygiene, who live in the most complete filth and the most frightening promiscuity with all kinds of animals.”<sup>1</sup> He was buoyed by the campaign’s progress but pessimistic about long-term success as he noted, “I think that we have improved hygiene considerably, but given the nature of the Indigenous population, I doubt very much that these good customs will be conserved when we cannot continue exercising the strict monitoring we have applied during the current year, during which we made 189,048 house visits.”<sup>2</sup> Even when public health officials intervened directly into the intimacy of domestic life to impose hygienic “customs,” they not only assumed that *indígenas* lacked such standards but that they would abandon any they had acquired in the absence of state surveillance. Like many of his predecessors and contemporaries, Sáenz believed that *indígenas* perpetrated their own demise.

To portray *indígenas* as incubators and vectors of disease, Ecuadorian and Guatemalan public health officials deployed hygienic determinism and cultural essentialism, which facilitated treating contingent elements of the social world as a set of fixed qualities associated with stereotypical notions of indigeneity.<sup>3</sup> They spuriously associated poor hygiene with indigeneity to explain infectious disease outbreaks in Indigenous communities. Informed by historian Ruth Rogaski’s study of hygiene as a discourse focusing on Chinese deficiency,<sup>4</sup> I use the term “hygienic determinism” to characterize public health professionals’ and government officials’ efforts to claim that allegedly unhygienic *indígenas* were the very sources and vectors of the diseases that compromised public health and ravaged Indigenous populations. In short, officials maintained time and again that *indígenas*’ (alleged) lack of hygiene determined their fate as a sick population.

Like hygiene, diseases are as much social, political, and cultural as they are biological. By the 1940s, scientists had demonstrated that fleas infected with the bacteria *Yersinia pestis* spread bubonic plague by biting humans.<sup>5</sup> Bubonic plague can cause serious illness and death. Symptoms include fever, headache, chills, weakness, and swollen, painful lymph nodes (called buboes). Ignoring the biological aspects of bubonic plague, Sáenz Vera attributed the disease to *indígenas*' alleged lack of hygiene to construct a narrative about how that population bred and spread the disease.

His contemporaries deployed different diseases to the same effect. “Almost all of the province has fallen prey to [typhus], more than anything the indigenous class, the Ladinos [Europeanized, non-indigenous people] of a different cultural level understand much better what hygiene means,” noted Guatemalan doctor Carlos Catalán Prem in his 1940 study of typhus in the predominantly Indigenous province of Chimaltenango.<sup>6</sup> Like Sáenz Vera, Catalán Prem portrayed *indígenas* as unhygienic contributors to epidemics. Their Ecuadorian counterpart, Dr. E. Salazar Pazmino, associated typhus with indigeneity when he classified a 1945 outbreak at Hacienda Zumbahua as “typhus of the indigenous race.”<sup>7</sup> A decade earlier, Ecuadorian Dr. J. M. Espinosa observed, “[t]he illness of the *indígenas* in this zone is typhoid.”<sup>8</sup> Framing *indígenas* as incubators and vectors of disease compromised their capacity to engage fully (and be recognized) as citizens of the nation with all the rights that this entailed. Linking bubonic plague, typhus, and typhoid to Indigenous living conditions and customs, public health officials like Espinosa, Salazar Pazmino, Catalán Prem, and Sáenz Vera considered *indígenas* incapable of preserving their health. Guatemalan and Ecuadorian public health professionals deployed hygienic determinism to portray *indígenas* as dirty people who needed to be taught how to keep themselves and their surroundings clean. Indeed, Ecuadorian Dr. Enrique Garcés told Kichwas in Otavalo (a highland market town with a significant Indigenous presence): “I come again to teach you how you should live.”<sup>9</sup>

Poverty and poor sanitation enabled typhoid and typhus. Typhoid is caused by ingesting drink (most often water) or food contaminated with human feces and the bacterium *Salmonella typhi*. Severe sewerage system shortcomings and little access to potable water led to epidemics. The disease was slow to develop; symptoms included coughing, headaches, digestive disturbances, and physical weakness. Spread by the *Pediculus humanus* louse that lives and lays eggs in clothing and hair that maintain body warmth, typhus occurs in cold, dry climates where bathing is infrequent. Typhus generally broke out during seasonal droughts that created conditions favorable to louse populations. Another causal factor was overcrowded dwellings with multiple people sleeping together, of the type Guatemalan and Ecuadorian officials associated with Indigenous hous-

ing. Some five to fifteen days after infection, skin rashes appeared on patients who also experienced headaches, body aches, prostration, fever, and chills. In crowded marketplaces and religious ceremonies (such as wakes and funerals), lice (and thus typhus) could spread quickly among people.<sup>10</sup>

Betraying racist thought, many Guatemalan and Ecuadorian public health and government officials attributed high incidences of disease among *indígenas* to culture and (unhygienic) customs rather than to structural determinants of abject poverty. Once reified, causal relationships between race, hygiene, and disease were difficult to extirpate. As much as medical science, race shaped how public health officials approached infectious-contagious diseases and the *indígenas* who contracted them. Even officials who noted *indígenas*' impoverished and unsanitary living conditions called for cultural change rather than economic reform. By emphasizing *indígenas*' alleged unhygienic practices as catalysts of disease, officials deflected attention from the massive inequalities in land ownership that circumscribed *indígenas*' access to wealth and sanitation infrastructure such as piped water and sewer systems that were so crucial to wellbeing. Combining hygienic determinism and cultural essentialism allowed public health officials to avert public attention from the state's shortcomings and its targeting of urban, non-Indigenous populations by drawing attention to *indígenas* in nations that already considered them derelict drunks destined to undermine national progress.

International interlopers similarly disparaged *indígenas*. Referencing geophagy (a condition most common among rural poor pregnant women and children) whereby individuals eat earth (especially chalk or clay) to palliate iron deficiencies, Rockefeller Foundation (RF) representative in Guatemala Walter Rowan dubbed some Indigenous people "dirt-eaters" (figure 1).<sup>11</sup> RF officers often equated disease with filth.<sup>12</sup> Informed by U.S. Anglo elites' racist perceptions of their southern neighbors, RF representatives absorbed Guatemalan elite portrayals of *indígenas* as being diseased and dirty.<sup>13</sup>

Although their concern was more about sanitation than hygiene, RF representatives portrayed Indigenous customs as problematic. Convinced "Indians would not use it," Rowan did not furnish outhouses with a toilet seat.<sup>14</sup> Rowan's successor Alvin Struse complained that many *indígenas* refused "to use them [latrines] under any circumstances."<sup>15</sup> Struse and Rowan were advancing what historian Warwick Anderson calls "excremental colonialism" whereby US medical managers in developing nations assumed that dark-skinned inhabitants defecated promiscuously. To improve public health in those places, US military and medical personnel trained local populations in hygiene and designed and developed sanitary infrastructure.<sup>16</sup>



Racial scapegoating persisted over time even as understandings of disease etiology became more accurate. By the 1920s, medical professionals understood that lice, which was exacerbated by drought, poverty, and poor sanitation, propagated typhus. Yet, in 1933 the Guatemalan Minister of Health attributed it to high altitudes and indigeneity.<sup>17</sup> Well into the 1940s, knowledge about the connection between lice and typhus often precipitated the pathologization of *indígenas* for their alleged lack of hygiene because lice thrived in dirty quarters.

Even when causation was obscure, authorities blamed *indígenas*. When 34 people died of typhoid fever in the predominantly K'iche' Maya city of Totonicapán in 1933, the *jefe político* attributed their demise “to the neglect among

families for the recovery of the infirm, whether due to a lack of resources or because they did not submit to treatment at the appropriate time.”<sup>18</sup> By highlighting their poverty, but insisting that their neglect and ignorance had precipitated the fatalities, the Guatemalan governor advanced racist thought. Like many of his predecessors and contemporaries, he deployed cultural essentialism rather than social medicine.<sup>19</sup>

When infectious diseases broke out in non-Indigenous regions and towns, however, authorities elided ethnicity and hygiene. In 1929, typhoid epidemics that hit the Indigenous provinces of Sacatepéquez, San Marcos, and Quetzaltenango were quickly contained. In contrast, typhoid persisted in the ladino provinces of Retalhulew and Mazatenango despite the distribution of the Mulford vaccine. Those reports largely ignored ethnicity.<sup>20</sup> Officials only rarely referenced let alone maligned ladino or Creole (pure-blooded Spaniard) hygiene and health.

Focusing on infectious diseases like bubonic plague, typhoid, and typhus reveals fault lines between race, hygiene, and public health. Although racism permeated relations from the highest levels of government and society to the most marginalized populations in each country, Ecuador’s strands of discrimination were less virulent than Guatemala’s blatant bigotry. In both countries, associating infectious diseases with Indigenous hygiene stigmatized *indígenas* as disease incubators and carriers thereby diverting attention from each government’s inability (or unwillingness) to improve rural health.<sup>21</sup> Although Guatemalan and Ecuadorian authorities, intellectuals, and medical professionals mobilized racist thought to promote their priorities by portraying *indígenas* as dirty and diseased and Indigenous healing practices as retrograde and dangerous,<sup>22</sup> Ecuadorian government and health officials generally showed more respect to *indígenas* and their health practices than did their Guatemalan counterparts. In contrast to Guatemala, Ecuadorian officials did not demand assimilation and sometimes corrected for such overreach. Neither government was working alone as their efforts were supported and shaped, to varying degrees, by the RF. Whereas Guatemalan officials were more likely than their Ecuadorian counterparts to associate typhus with indigeneity, RF representatives generally thought of typhus as a disease of war, poverty, and poor hygiene—the last two of which they associated with Guatemalan *indígenas*.

Ecuadorians and Guatemalans were part of a vibrant international network connecting Latin American medical professionals, capitalists, and government officials with US scientists, physicians, and philanthropists, including representatives from the RF who worked in Guatemala and Ecuador. Although many Guatemalan, Ecuadorian, and RF public health officials disparaged Indigenous culture as a threat to public health, more than a few respected *indígenas* as valuable contributors to the nation’s well-being.

A comparison of two public figures suggests the broad contours of distinct engagement with and perceptions of *indígenas* within and between Ecuador and Guatemala. Ecuadorian Dr. Pablo Arturo Suárez (1888–1945), the general director of the Servicio de Sanidad from 1926 to 1929, was raised in Ambato and its environs, and thus was familiar with Andean Indigenous culture, unlike many of his contemporaries, whose lives and work centered around Guayaquil. His writings on Indigenous life in the 1930s reveal an empathy and understanding lacking among many of his predecessors and contemporaries.<sup>23</sup> Speeches in Kichwa and radio broadcasts aimed at *indígenas* demonstrate Ecuadorian officials' and medical professionals' efforts to integrate them through public health campaigns. Public health officials expressed concern that rural Indigenous migrants spread disease in Quito, but they also praised the health benefits of the highlands.<sup>24</sup>

Suárez's compassionate portrayal of *indígenas* distinguished him from Guatemalan Nobel Laureate Miguel Angel Asturias, who disparaged Indigenous culture and proposed miscegenation and acculturation to improve *indígenas'* and the nation's lot.<sup>25</sup> Paternalistically and sometimes punitively, Guatemalan administrations sought to convey "a very special effort in favor of the health of the *raza indígena*," according to dictator Jorge Ubico's administration (1931–44).<sup>26</sup> Mitigated racist thought helped Ecuadorian officials facilitate more efficacious public health campaigns than their Guatemalan counterparts. While officials in Guatemala were quick to racialize disease, Ecuadorians had a less discriminatory approach.

### **Historical Context, Historiography, and Methodology**

Throughout Latin America, early twentieth-century public health campaigns demonstrated the efficacy of laboratory-based medicine and the ability of state-sponsored scientific medicine to contain epidemics and cure debilitating diseases.<sup>27</sup> An important part of those efforts consisted in emphasizing the importance of hygiene. Early twentieth-century Colombians like doctor and hygienist Pablo García Medina maintained that hygiene campaigns would facilitate the nation's transition into a "civilized and modern nation."<sup>28</sup> Like other Latin American officials, the Colombian government's goal was to indoctrinate young students and workers in hygienic practices (and good nutrition).<sup>29</sup> As such, officials often situated public health initiatives squarely in the scientific field of hygiene.<sup>30</sup> Yet science could be used to marginalize people.<sup>31</sup> As scholars have adeptly demonstrated, racism often informed and was perpetuated by public health campaigns.<sup>32</sup> The synergy between racism and public health initiatives was evident

when government and public health officials deployed public health initiatives to pathologize particular social groups, as Guatemalan and (to a lesser extent) Ecuadorian officials did with *indígenas* via hygienic determinism.<sup>33</sup>

Ecuador and Guatemala represent different, albeit sometimes overlapping, elite approaches to indigeneity which both shaped and were shaped by the history of public health. To understand the intersections of hygienic determinism and cultural essentialism, I triangulate archival materials from Guatemala, Ecuador, and the Rockefeller Archive Center (RAC) in Sleepy Hollow, New York. Putting those archives in dialogue with one another reveals that historical actors in different nations and organizations distinctly deployed hygienic determinism and cultural essentialism in addressing *indígenas* and public health.

*Indígenas* figured prominently in both countries, but in dramatically different ways. Whereas Ecuadorian elites framed *indígenas*' well-being as essential to national development, Guatemalan elites generally disparaged *indígenas* as mentally and physically deficient. By the 1920s, Ecuadorian *indígenas* organized and collaborated with other rural laborers to demand the recognition of their rights and to improve rural working and living conditions.<sup>34</sup> *Indígenas* increasingly positioned themselves at the center of national discourse and identity as a military coup led to the 1925 *Revolución Juliana* (Julian Revolution) that promised a more humane government. In sharp contrast to Guatemala, Ecuador's authoritarian rule had at least a semblance of representative governance, and it often encouraged Indigenous participation in civic life. Guatemala's quasi democratic reprieve during the 1920s was wedged between the rule of two brutal dictators—Manuel Estrada Cabrera (1898-1920) and Jorge Ubico (1931-1944)—who primarily sought to keep *indígenas* healthy enough for them to perform manual labor. Faced with fascist rule, the early twentieth-century Indigenous leaders and entrepreneurs who carved out spaces of autonomy and wealth were the exception to the vast majority of *indígenas* who struggled to thrive amidst marginalized living and health conditions in a nation with one of the most unequal land distributions in Latin America.<sup>35</sup>

Ecuadorian and Guatemalan Indigenous populations generally had little access to wealth, education, or authority. In Guatemala, *indígenas* comprised the majority of the population—some 65 percent in 1921.<sup>36</sup> By 1940, Ecuador and Guatemala each had populations of about three million people. Although thirty-nine percent of Ecuadorians and forty-five percent of Guatemalans were identified as Indigenous that year, both estimates likely undercounted *indígenas*.<sup>37</sup> In both countries, *indígenas* occupied similar places in racial hierarchies shaped by conquest, colonization, and slavery. Although each nation's racial order varied over time, its broad contours remained consistent: a few entrepreneurial and professional *indígenas* notwithstanding, lighter-skinned citizens enjoyed more



social, economic, and political privileges than their darker-skinned counterparts.<sup>38</sup> Nineteenth-century Ecuadorian historian Pedro Fermín Cevallos lauded *indígenas*' ability to carry heavy loads over long distances but otherwise considered them "weak and lazy" and an "absolutely negative" factor "in the civilization of the country."<sup>39</sup> Such perspectives were typical of most nineteenth-century and early twentieth-century Ecuadorian and Guatemalan elites, who framed *indígenas* as problematic and sought to disrupt their cultural, economic, and social systems.<sup>40</sup> For example, distinct forced labor systems in each country restricted Indigenous mobility, autonomy, and wealth well into the twentieth century.<sup>41</sup>

Those who shed their Indigenous markers, like language and clothing, could adopt a ladino or mestizo identity and hope for the spoils that came with it. But many *indígenas* remained steadfast in their claims of ethnicity and citizenship,<sup>42</sup> even though the latter was restricted to those able to pass literacy tests.<sup>43</sup>

In Guatemala, where three-quarters of the population was rural (and nearly 70 percent worked in agriculture),<sup>44</sup> *indígenas* boasted more than twenty different linguistic groups. In Ecuador, regional differences distinguished Kichwa speakers in the Andes mountains, various Amazonian tribes, and a few Indigenous groups along the coast. In both nations, the vast majority of Indigenous peoples lived in the mountains and thus encountered diseases distinct from those that lashed lowland populations. As a result, when highland *indígenas* migrated to the coast to work on cacao, coffee, and other plantations, they were particularly susceptible to tropical diseases like yellow fever.

### **Infectious Diseases and Indigenous Ecuadorians**

As the catalyst for founding Ecuador's Servicio de Sanidad office in 1908, bubonic plague was a persistent concern among Ecuadorian public health and medical professionals. On a number of occasions, they invited RF representative John Long and others to strategize control and eradication measures. Up until the mid- to late 1920s, Ecuadorian medical professionals considered urban coastal areas incubators of the plague and railway cars and rats as its vectors. Thereafter, Ecuadorian officials increasingly attributed bubonic plague to rural Indigenous regions.<sup>45</sup> Writing to the Minister of the Interior in February 1916, one public health agent who worked in the Indigenous community of Tixan explained that the bubonic plague had returned, "particularly among the indigenous class and has caused many victims [...] gravely threatening public health."<sup>46</sup> His report preceded the shift in perceived bubonic plague geographies and demographics. A decade later *indígenas* were more squarely in the sight lines of those tracking

the plague. During a 1926 outbreak, the Chimborazo health delegate asserted that “all the plague cases have occurred among indigenous people.”<sup>47</sup>

Located in the mountains above Alausi, Tixan was one of the first highland towns where the railroad introduced infected rats that took refuge in empty crates sent back to the dairy production area of Guaytacama near Latacunga. When bubonic plague broke out in Alausi, Indigenous laborers were conscripted into municipal public works to disinfect the railway station and houses. Some contracted the plague and subsequently infected their highland villages. It was conscription, not culture, that spread the disease.<sup>48</sup> “Since the time you noticed the mortality of *indios* [...] the number of deaths has risen rapidly,” informed Dr. Alfonso Mosquera in 1929.<sup>49</sup> Without blaming *indígenas* for bubonic plague, Mosquera suggested they were a threat to public health. To contain the plague the following year, the Imbabura Public Health Delegate focused the public health campaign on collecting fleas from “*indígenas*’ houses.”<sup>50</sup> Unlike their Guatemalan counterparts, neither her nor Mosquera explicitly identified Indigenous culture or lifestyles with disease. That restraint can be attributed in part to the strong historical tradition of social medicine in Ecuador: dating to the colonial period, practitioners understood that destitution undermined health and thus attributed high incidences of disease among *indígenas* to structural determinants of poverty rather than their culture.<sup>51</sup> Those influences were neither omnipotent nor omnipresent, however.

Scapegoating *indígenas* as threats to public health was part of a larger turn-of-the-century effort to shed Ecuador’s reputation as a country with poor hygiene and sanitation. At the time, few homes in either Quito or Guayaquil had indoor toilets. Consequently, much waste was destined for street gullies, which rain washed out. But during the dry season, accumulated waste created infection focal points and typhoid epidemics. In 1900, Quito established the Cuerpo de Salubridad to police public health. With mule-drawn carts, sweepers perambulated the capital to clean up trash and canals. Hygiene manuals encouraged bathing and changing underwear weekly. Their limited distribution notwithstanding, the manuals would have been of little use to illiterate *indígenas* and did little to curb the tendency to associate *indígenas* with filth and disease.<sup>52</sup>

Reluctant to associate poor hygiene and sanitation with their predominantly Indigenous communities, some authorities sought exogenous culprits. In 1918, Otavalo suffered from typhoid that local officials insisted had arrived via commerce with Quito and its Indigenous neighborhood of Cotocollao where a number of people contracted typhoid. Otavalo officials explained that since “the majority of people did not have any custom of cleanliness, it is very just to assume they can bring us new cases.”<sup>53</sup> That authorities from one Indigenous community accused another group of *indígenas* of lacking “any custom of cleanliness”

demonstrates how nuanced discourses of anti-hygienic *indígenas* could be used to advance the agendas of some *indígenas* even as they denigrated others.

Absent state resources, some *indígenas* coordinated efforts to guard their public health. Such was the case with Sigchos *indígenas* who practiced arm-to-arm “smallpox inoculation as a traditional custom” into the 1930s.<sup>54</sup> By then variolation was unusual in most places, having declined in the early twentieth century when Latin American laboratories deployed bacteriology to develop smallpox vaccine from a bovine lymph that could be preserved in calves.<sup>55</sup> Of the nine vaccination methods Latin American doctors had identified by 1938, they considered the one employed by Sigchos *indígenas* “painful and bloody.”<sup>56</sup> It also risked contaminating the liquid with diseases such as malaria that were carried in blood.<sup>57</sup> Such drawbacks notwithstanding, arm-to-arm inoculation ensured a sufficient supply of vaccine, especially in difficult to reach rural villages. At least one Ecuadorian public health inspector lauded this clever, low-tech solution for providing vaccine to remote locations.<sup>58</sup> Despite those efforts and public health officials’ celebration of them, cultural essentialism prevented some medical professionals from recognizing, let alone acknowledging, Indigenous ingenuity.

In May 1930, typhoid was devastating Sigchos. “I have not received any help to date for the health of this town that finds itself seriously threatened,” the local *teniente político* complained on May 10<sup>th</sup>.<sup>59</sup> Assigned to address the epidemic in Sigchos, the regional public health official, Dr. R. Jeráud, concluded that typhoid would claim “many victims, taking into account the manner of living, customs, etc. of the people who live in that territory.”<sup>60</sup> A manifestation of cultural essentialism with hints of hygienic determinism, his reference to *indígenas*’ alleged “manner of living, customs, etc.” impugned *indígenas*. Discounting the capabilities of people who engineered their own public health initiatives, Dr. Jeráud revealed the extent to which his prejudices obscured his comprehension of Indigenous resourcefulness and realities. Apparently unaware that Sigchos *indígenas* had already vaccinated themselves, Dr. Jeráud intended to vaccinate Sigchos residents against smallpox while he coordinated the anti-typhoid campaign.<sup>61</sup> In light of his willful ignorance of Indigenous experiences, it was probably best that Dr. Jeráud resigned from the campaign for personal and professional reasons before setting foot in Sigchos.

Over the next three months, typhoid wreaked havoc in Sigchos. On August 20, a local leader decried: “There are various cases of typhoid, resulting in calamity in many homes. One cannot combat this plague, leaving so many sick.”<sup>62</sup> On September 6, public health workers finally arrived to disinfect homes. Quarantining the sick proved more challenging. “Moving the *tíficos* to the Latacunga *lazareto* [quarantine station] is very difficult because the distance

between the towns is great and the road rough. In this case, it is better to set up a pest house here,” explained a public health official.<sup>63</sup> With those interventions, the crisis subsided.

Sigchos *indígenas* countered portrayals of them as part of the problem by becoming instrumental in halting the epidemic. On October 11, Franciso Arrieta reported, “The state of the epidemic in Sigchos is in much better condition, thanks to the aid offered by the Health [department], through the Mobile Inspector and the resolute support of the community’s residents.”<sup>64</sup> Disproving Dr. Jeráud and other officials who dismissed Indigenous public health measures, Sigchos *indígenas* facilitated their community’s recovery. Despite such stark evidence of *indígenas* arresting rather than perpetuating the spread of disease, associations of their communities with infectious diseases continued.

Ecuadorian authorities also regularly associated typhus with *indígenas*. In his 1931 state of health report, General Director of Public Health Dr. Alfonso Mosquera Narváez noted that public health was generally satisfactory “except for frequent outbreaks of typhus in the indigenous population.”<sup>65</sup> By contrasting an otherwise healthy nation with regular attacks of typhus among *indígenas*, Mosquera portrayed them as a source of the nation’s ills. *Indígenas*’ aversion to medical care fueled impressions that they exacerbated epidemics. Notified that he would be transported to the hospital on October 27, 1931, an “indio” who had contracted typhus hid in “una chichería” (a drinking tavern for *chicha*).<sup>66</sup> Generally portrayed as “dens of corruption and vice where *la raza india* degenerates”<sup>67</sup> and diseases flourished in malnourished, inebriated bodies, *chicherías* were considered public health threats. Although health inspectors eventually located him, they noted that “resistance and a tendency to hide sick people” pervaded the Indigenous population.<sup>68</sup>

Infirm *indígenas* who hid from authorities were responding in part to a long history of deleterious outcomes resulting from engagement with public health initiatives, medical professionals, and hospitals. Authorities’ complaints of Indigenous aversion to state-sanctioned scientific medicine discounted their concerns that overcrowded and under-resourced hospitals in Ecuador (and to a lesser extent Guatemala) were death chambers.<sup>69</sup> Even those who recovered from their initial illness in hospitals often fell victim to nosocomial diseases. An Ecuadorian inspector’s January 22, 1910 description of the Latacunga *lazareto* painted a perverse picture: “The establishment is narrow, dirty, humid, dark, anti-hygienic; after a few days in that pigsty, an individual who has the misfortune of landing there even in good mental and physical health would undoubtedly lose their mind and health, each and every one of the departments in that house are frightening and repugnant,” he decried.<sup>70</sup> With well-informed and rational

decisions, many *indígenas* eluded authorities even on their death beds rather than be admitted to a hospital.

Without deploying the cultural essentialism that associated indigeneity with disease, officials like Dr. Espinosa continued to identify Indigenous communities as disease propagators. In 1933, typhoid cases increased “sporadically in indigenous villages that were the origins of epidemic outbreaks of that disease” in Cotacachi he explained.<sup>71</sup> A concurrent typhoid epidemic in nearby Otavalo had similarly “alarming characteristics.”<sup>72</sup> By pointing to the propensity of typhoid in highland Indigenous communities, Espinosa was neither blaming them for that fate nor claiming that only *indígenas* could contract it. Such observations more likely reflected reality than racism.

In response to those epidemics, Dr. Carlos A. Espinosa recommended constructing cemeteries in Indigenous neighborhoods so that cadavers could be buried a few hours after death. With this, he wanted to achieve two goals: “First, to prevent wakes, origins of typhoid epidemic outbreaks, and second to prevent the danger of infection of city residents when decomposing cadavers, deceased from infectious-contagious diseases are carried through the streets [...] in coffins that are not hermetically sealed.”<sup>73</sup> It is unlikely that funeral wakes contributed significantly to typhoid infection among those attending. Since typhoid has largely a fecal-oral transmission route, the extent to which wakes could spread disease depended on how much people ate and drank at them (and who prepared the food and drinks).

At times medical professionals and officials sought to restrict Indigenous customs without explicitly mentioning race. Such was the case when in 1914, Dr. León Becerra recommended that authorities “extirpate the ill-fated and uncivil custom of conserving cadavers for more than 24 hours in homes, as a pretext for immoral and anti-hygienic orgies.”<sup>74</sup> His reference to conserving cadavers for more than 24 hours described most Indigenous funerary rituals; his framing of these as immoral and anti-hygienic orgies draws upon hygienic determinism (and hints of cultural essentialism).

Although Becerra did not explicitly conflate offending wakes with Indigenous customs, his counterpart Dr. Miño sometimes did. “Today I saw a cadaver in an almost open casket, completely nude and carried by two *indígenas* for a wake in a private home,” Miño exclaimed.<sup>75</sup> The dissection hall porter had delivered the cadaver “just as he had found it on the dissection table.” In an observation that further revealed his prejudices, Miño concluded that is how “one sees cadavers in savage/feral [*salvajes*] *pueblos*.”<sup>76</sup> To marginalize certain groups, officials and neighbors portrayed their rituals as barbaric and attributed their illnesses to spending too much time with corpses.

Whether informed by racist thought or not, Ecuadorian public health officials continued to identify Indigenous wakes as propagators of typhoid. Arguing that wakes jeopardized public health, the Guaranda public health inspector explained, “*Indígenas* are accustomed to holding a wake with cadavers for more than two days and in most cases [...] without knowing the cause of death.” He implored his superiors to, “urgently order severe prohibitions and employ effective measures to banish those customs.”<sup>77</sup> By locating the cause of typhoid outbreaks in Indigenous customs, he deployed cultural essentialism to restrict Indigenous mobility and autonomy.

Scientific methods and knowledge were little match for cultural essentialism and hygienic determinism. Even when medical professionals recognized barriers to health and catalysts of disease long identified by medical science, racism diverted their gaze toward alleged Indigenous ignorance and filth. When typhoid erupted in the Indigenous town of Tocachi in December 1939, the Ecuadorian health inspector Dr. Rogelio Yáñez was convinced that residents were to blame for their plight. Like many of his predecessors and counterparts, Yáñez deployed hygienic determinism to associate Indigenous people and culture with filth. He explained: “They live reprehensibly: completely ignorant of hygiene in their houses [and] with their bodies. To this, add the bad quality of water, which is insufficient for public service, [and] a minimal economic situation. The life of the inhabitants unfolds primitively [...]. At each step one finds idiots, morons and the majority with mental deficiency that forces one to despair.”<sup>78</sup> Further jeopardizing public health, he noted, the school and jail were in the same building.

Authorities often failed to ameliorate and sometimes facilitated the very conditions that condemned particular populations to their stigmatized attributions.<sup>79</sup> Combining hygienic determinism and racist thought, Yáñez blamed *indígenas* for their compromised health conditions that emanated from structural poverty. Instead of condemning the state for neglecting to provide clean water, alleviate *indígenas*’ poverty, or separate incubators of disease (schools and jails), Yáñez criticized impoverished *indígenas* for failing to maintain hygiene even though few had the resources to do so. As state employees of the health administration, Yáñez and his counterparts likely sought to divert criticism of state agencies and their responsibilities. Blaming people for their ills helped to obscure socioeconomic determinants of health and the state’s shortcomings in Ecuador and elsewhere.<sup>80</sup>

The consistency with which racist discourse portrayed *indígenas* as depraved and their customs as contagions suggests that social medicine often wilted in the face of racist thought in Ecuador. Yáñez recognized that poverty and dirty water undermined health but framed them as less impactful than indigeneity. His observations suggest that perceptions of how *indígenas* engaged with (or

rejected) public health practices were just as important as any particular science or epidemiology in shaping public health initiatives. Like Yañez, many actors charged with improving public health mobilized social constructions of race and hygiene to advance their own agendas and marginalize *indígenas*. Three years earlier, an Ecuadorian official reiterated that the challenge of convincing “indigenous factions [*parcialidades*] to subject themselves to medical treatments: [was due to] prejudices and superstitions.”<sup>81</sup> Ecuadorian officials’ portrayals of *indígenas* as biased, delusional, dirty, and retrograde undermined public health campaigns by focusing attention on culture rather than socioeconomics and science.

As they did with typhoid, Ecuadorian officials continued to racialize typhus. When it erupted “with very alarming characteristics [...] in Caserio Yuracucito very close to the city” in 1942, an official lamented, “Not one of those affected survived, in less than a month, fifteen people died, infecting the *indígenas* from Yuracruz Grande.”<sup>82</sup> Desperate for “funds, medicine, and specialized personnel to attend to the sick and avert this terrible scourge that proliferates in Ibarra,”<sup>83</sup> this official and other authorities who assumed *indígenas* were particularly vulnerable to contagion argued that immediate action was critical “to prevent the propagation of typhus.”<sup>84</sup>

When public health officials spoke directly to *indígenas*, they seldom hid their disdain for Indigenous lifestyles and habits. Tending to be of *blanco mestizo* (white mixed-race identity) or another non-Indigenous descent, many spokespeople assumed superiority and spoke condescendingly. When the aforementioned Dr. Garcés visited his birthplace Otavalo on June 10, 1945, to deliver a speech about typhus in Kichwa, he set a paternalistic tone early on: “In your language [...] I come again to teach you how you should live and how you can guard against this illness that is in your land.”<sup>85</sup> Like Dr. Jeráud who disparaged *indígenas*’ “manner of living, customs, etc.,” Dr. Garcés assumed *indígenas* did not know how to live healthy, hygienic lives. In addition to warning people not to hide the infirm, he commanded them to “not eat lice because you will get sick.”<sup>86</sup> Although his contemporaries similarly critiqued *indígenas* for consuming insects—Sáenz Vera decried *indígenas*’ “repugnant customs of consuming dead animals they encounter and chewing ticks and fleas”<sup>87</sup>—Garcés misunderstood that Indigenous practice: *indígenas* bit lice to kill them, not to consume them.<sup>88</sup> Before he left, Garcés reminded the Indigenous audience to, “wash well [and] sweep your homes.”<sup>89</sup> Like his predecessors, Garcés combined hygienic determinism and cultural essentialism to portray *indígenas* as catalysts of infectious diseases.

## Infectious Diseases and Indigenous Guatemalans

With more virulent racism than Ecuador, Guatemala had written Indigenous denigration into its official documents. According to the 1893 census, “*Indios* do not advance as rapidly as the whites or Ladinos [...]. The efforts of the government to instill into the *indios* new customs, showing them new paths to success, have been met with but little reward, due to their systematic ways and unchangeable proclivities and ideas.”<sup>90</sup> As the nation sought to enumerate and describe (if not understand) its populace, it assumed Indigenous customs were a deficit. Deploying the pejorative term *indios*, the authors conveyed a racial hierarchy that privileged whites and ladinos who embraced modernization. In turn, efforts to modernize *indígenas* allegedly had been fruitless. Read from Indigenous perspectives, however, their “systematic ways and unchangeable proclivities and ideas” were evidence of efficacious resistance. The census and its authors highlighted a broader racist social structure into which other relations, including those surrounding public health, fit. Those assumptions and the racist thinking that informed them undermined public health initiatives.

When typhus erupted in the Kaqchikel Maya (henceforth Kaqchikel) towns of San Andres Itzapa and Patzún in 1915, Drs. Catalán Prem and Federico Azpuru España quickly deployed a control plan that included disinfection. Their efforts staved off an epidemic, but Minister of Health J.M. Reina Andrada emphasized that “superb hygienic conditions in almost all of the country” were crucial to prevent epidemics.<sup>91</sup> If those were the conditions critical to good health, Reina Andrada implied, then an outbreak in San Andres Itzapa and Patzún could be attributed to Kaqchikel residents’ failure to maintain good hygiene.

Although cultural essentialism had strong roots in medical science, a few officials deployed class rather than race to frame public health analysis. When the Guatemalan Minister of Health attributed various infectious diseases including typhus, typhoid, and influenza to heavy rains in 1917, he quickly sent “extraordinary doctors and sufficient medicine to attack those ills and prevent their propagation principally among the proletarian class, which is the one that suffers most in these cases.”<sup>92</sup> Although unaware that heavy rains would not have contributed to typhoid, typhus, or influenza, the Minister resisted pathologizing indigeneity, unlike many of his contemporaries and successors.

Armed with the knowledge that lice spread typhus, Guatemalan public health officials often associated that parasitic insect with Indigenous lifestyles. In 1923, the government established an Office of Disinfection in the predominantly Kaqchikel province of Chimaltenango, “to eradicate white lice, the transmitting agent of typhus.”<sup>93</sup> A 1928 public health department publication stated, “**Where there are no lice, there is no typhus. A typhus patient without lice is not**



**contagious.**<sup>94</sup> Simply put, “The fight against typhus has been reduced to a fight against lice and against those who have lice.”<sup>95</sup> Without explicitly identifying *indigenas*, the publication suggested their role in contagion by emphasizing that the disease was common “among dirty and abandoned people in some populations that can constitute the point of departure for major propagations if they disregard sanitation authorities’ prophylactic prescriptions.”<sup>96</sup> The description of “dirty and abandoned people” who regularly resisted authorities’ overtures reflected a derogatory discourse about *indigenas* in Guatemala. The author(s) deployed cultural essentialism and hygienic determinism without referencing race.

In these complex racial, economic, and social circumstances, authorities may not have based their decisions on racism alone. Public health officials correctly correlated unsanitary settings and lice. The science that traced typhus to lice and the cramped and unclean living conditions that propagated them was undeniable. Yet many officials had equated *indigenas* with horrible hygiene to such an extent that learning otherwise could be shocking for them. In 1933, a regional public health inspector admitted, “[In] San Andres Xecul—a distinctly indigenous town in the department of Totonicapán [...] I was surprised to find that the [...] only butcher shop in town [...] was in very good hygienic condition.”<sup>97</sup> If contemporary ethnographic studies that portray Indigenous homes as clean and *indigenas* as regular bathers attuned to personal hygiene are any indication, officials should not have been “surprised” when they encountered such conditions.<sup>98</sup>

Public health officials tailored narratives of typhus to reinforce (or obscure) hierarchies of power. Calling on “all citizens, even those who consider themselves free from” typhus, the publication maintained that the disease was “very easy to prevent by just obeying the most basic hygiene principles and personal cleanliness.”<sup>99</sup> The author(s) asserted typhus “is a disease that should not endure in cultured nations, which is precisely why it should be definitively banished from our country.”<sup>100</sup> Read in context of the 1893 census that insisted that “*indios*” resisted “new customs,” the author(s) subtly scapegoated *indigenas* whom they portrayed as undermining an otherwise “cultured nation.” According to non-Indigenous elite Guatemalan men, typhus was easy enough to eradicate with the right population. But to their minds, class and ethnicity shaped public health in ways that conspired to block Guatemala’s path to modernization.

When typhus broke out in the Ladino city of Tejutal (San Marcos) in 1933, “Superior Authorities” sent medicines and a police force to “maintain discipline during the three-month epidemic” and used “scientific order” to establish the cause of the epidemic.<sup>101</sup> As they were depicting a ladino population, public health officials emphasized, “poverty, hardship [*estrechez*], and murkiness of homes,” instead of ethnicity.<sup>102</sup> It is unclear whether those particular public health

officials were more inclined to adhere to scientific explanations or they simply could not deploy the argument of ethnicity absent an Indigenous population. Yet the same officials showed sensitivity to Indigenous culture when typhus broke out in the *aldea* of Chiquilaja (Quetzaltenango). When they discovered students with lice, they ordered their heads shaved, “conceding to the girls a period of three days to delouse” since cutting females’ hair would have been experienced as an attack on Indigenous culture. Devoid of racist portrayals of *indigenas*, the two-pronged approach snuffed out typhus shortly thereafter.<sup>103</sup>

Authorities and public health officials noted intersections between the ethnicity and geography of typhus. In 1933, the Guatemalan Minister of Health observed that typhus outbreaks occurred primarily in the predominantly Indigenous highland departments of San Marcos, Sacatepéquez, Quetzaltenango, and Chimaltenango.<sup>104</sup> “Due to Chimaltenango’s highland climates and mountain ranges populated mostly by *indios*, one saw the threat of sporadic outbreaks of typhus,” he asserted.<sup>105</sup> Apparently ignorant of the contemporary etiology of typhus, the Minister of Health incorrectly attributed typhus to high altitudes and indigeneity rather than to lice. The Kaqchikel towns of Tecpán, Patzicía, and Santa Apolonia all had typhus cases throughout the year.<sup>106</sup> In Patzicía, victims were immediately isolated in a provisional hospital or interred outside of town, salvageable clothes were boiled while the rest were incinerated, and sulphur was applied in homes.<sup>107</sup>

Two years later, Dr. Francisco Quintana framed a typhoid outbreak in terms of class and geography rather than ethnicity. After 30 people had died of typhus in Huehuetenango in 1935, Dr. Quintana visited the sick in their homes, “going down and over deep valleys and hills, convincing myself that there was no hygiene, inhabitants’ extreme poverty [*paupérrimo*] and the distance between the sick made combatting the epidemic in patients’ homes useless.”<sup>108</sup> He related the lack of hygiene to poverty and geography rather than ethnicity. “Before being hospitalized, the sick were subjected to a ‘toilet,’” insisted Dr. Quintana so he ordered clothes boiled and furniture and houses fumigated and washed.<sup>109</sup> His intended meaning with the term “toilet” is unclear, but most likely conveyed how the allegedly poor hygienic and almost certainly compromised sanitation states in which rural (predominantly Mam Maya) peoples lived.

Dr. Quintana was the exception, however. Highland officials who racialized typhus were hypervigilant about the disease.<sup>110</sup> When typhus broke out around Lake Atitlán in the Indigenous communities of Santa Lucía Uatatlán and San Pablo la Laguna in 1939, Guatemalan public health officials’ quick response averted an epidemic. They emphasized that typhus, measles, and other contagious diseases remained a threat because *indígenas* had poor hygiene habits.<sup>111</sup> “The indigenous race does not observe any cleanliness in their homes, despite

the verbal dissemination the inspector provides in his visits [...] among the said race and by order of this office, so that slowly they will learn and put into practice the most basic regulations about hygiene,” noted the Department’s Director of Public Health.<sup>112</sup>

In one of the crueler ironies of Guatemalan history, the same officials who time and again claimed *indígenas* had poor hygiene habits advocated destroying Indigenous sweatbaths. Dating to the colonial era, authorities outlawed and periodically destroyed Indigenous sweatbaths because some colonial doctors considered them typhus propagators.<sup>113</sup> During the 1918-1919 influenza epidemic, Guatemalan authorities cited the *temascal* (sweatbath) as a propagator of disease and outlawed its use.<sup>114</sup> When influenza “dangerously returned” in El Quiché in 1933, authorities again attributed the outbreak to “the disastrous customs of the indigenous class [...] [particularly the] *temascal*.”<sup>115</sup> To ensure those “very harmful customs would disappear,”<sup>116</sup> authorities ordered “the destruction of [...] sweatbaths.”<sup>117</sup> Apparently ignorant of how state edicts undermined Indigenous hygiene, the Quiché *jefe político* (governor) attributed contemporaneous “epidemics that threaten collective health” to “the little attention that the indigenous race pays to hygiene.”<sup>118</sup> In a trend that contravened such racist portrayals of Indigenous hygiene, *indígenas* maintained the use of sweat baths even during prohibitions. Despite their regular bathing, perceptions of *indígenas* as dirty persisted. In 1941, the head of the Guatemalan Ministry of Health’s Epidemiology department insisted that typhus “is a difficult disease to eradicate among us because the *indígena* maintains unharmed one of the principal factors of transmission (lice) with their dirty habits and opposition to all hygiene measures.”<sup>119</sup>

At times, associations of indigeneity with disease led to prioritizing health services for *indígenas*. Informed by hygienic determinism and cultural essentialism, some public health campaigns targeted Indigenous communities. By 1933, local authorities distributed typhoid vaccine in such Indigenous towns as Santa Apolonia and Tecpán where typhoid was common.<sup>120</sup> Throughout the 1940s, typhoid vaccination programs continued in highland Guatemala.<sup>121</sup> In 1945, officials vaccinated against typhus and typhoid, isolated the sick, surveilled public water sources (to prevent typhoid), and administered *piojocida* (lice poison) to students (to reduce typhus) in the predominantly Indigenous province of Sololá.<sup>122</sup> Often identified as disease propagators, highland schools and their students and teachers were monitored by authorities. Vaccination campaigns via schools and other public institutions were effective. Despite rumors to the contrary, “not even a single true outbreak” occurred in 1945, the Minister of Health’s chief epidemiologist boasted.<sup>123</sup>

Critiquing the Guatemalan government for blaming *indígenas* for their health problems in July 1944, the public health official and author Dr. Epaminondas Quintana may have contributed to a shift toward highlighting geography, climate, and poverty rather than indigeneity in etiology.<sup>124</sup> The shift away from pathologizing *indígenas* continued into the democratic regimes of Juan José Arévalo Bermejo (1945–50) and Jacobo Arbenz (1951–1954). In Huehuetenango province, officials acknowledged that the 1945 anti-typhus campaign had faltered because of the “scarcity of personnel and considerable distance between villages.”<sup>125</sup> Some six years later, in 1951, Public Health Director Dr. Roberto Candana Lacape explained, “Typhus exantematico has been one of the scourges that causes more mortality in the cold zone of the Republic.”<sup>126</sup> Rather than associating typhus fatalities with *indígenas*, he attributed them to the cold climate.

Even as Guatemalan officials increasingly skirted associations of ethnicity and typhus, others steadfastly highlighted race.<sup>127</sup> In 1944, the Ministry of Health’s chief epidemiologist reported, “Rickettsiosis [typhus group] has remained endemic in the Republic in the cold regions of the country, principally in the zones where the indigenous race predominates, for that reason it boldly endures: [they] hide the sick, oppose fumigation of those who have come in contact with them, and in general they make very difficult the arduous struggle undertaken and sustained to eradicate this disease.”<sup>128</sup> Even as he recognized that cold temperatures facilitated typhus, the epidemiologist maintained that *indígenas* undermined anti-typhus campaigns. Although the Public Health department seldom provided statistics that tracked ethnicity, in 1944 they noted that 1,015 “*indios*” and 174 ladinos contracted typhus in Guatemala.<sup>129</sup> Without any context (the department also reported 2,144 cases of and 381 deaths by typhus in 1944, nearly double the 1,189 cases that “*indios*” and ladinos comprised for the year), those numbers confirmed officials’ claims that *indígenas* were more susceptible to typhus than other Guatemalans, even though the demographic preponderance of *indígenas* may have accounted for the statistical disparity.

When typhus outbreaks occurred among predominantly ladino populations, references to their culture and customs seldom appeared in public health narratives.<sup>130</sup> Shortly after authorities in the Jalapa aldea of “El Paraiso” reported a typhus outbreak in January 1944, special brigades arrived to combat it. Like in Indigenous communities, Flores (Jalapa) municipal officials created a *lazareto* for typhus patients and “disinfection room” to treat (rather than burn as they did with the clothing of *indígenas*) the clothes of those suspected of having typhus. Authorities applied a toxic shampoo to municipal school students instead of shaving their heads like officials did with Indigenous boys.<sup>131</sup> Comparing public health campaigns in Indigenous and ladino *pueblos* reveals that officials subjected *indígenas* to more violent public health interventions than ladinos. It also

demonstrates that racism shaped not only the diagnosis but also the treatment of disease, thereby perpetuating health indicator disparities across the population.

After an eclectic coalition comprised of those who chafed at fascist rule overthrew the Ubico regime on October 20, 1944,<sup>132</sup> the new democratic administration of Arévalo prioritized engaging *indígenas* when the public health department created a division to fight typhus. The 1947 decree mandating “Cox” typhus vaccination in the highlands conveyed the democratic government’s commitment to health in that area. In truth, brigades sent to fumigate people, homes, and clothes with DDT to kill lice likely had a greater impact than the Cox vaccine in reducing typhus. By sending Kaqchikel and other Indigenous intermediaries to explain the vaccine, the Arévalo administration convinced many *indígenas* to comply voluntarily.<sup>133</sup> When public health officials collaborated with *indígenas* rather than associating them with disease, public health campaigns benefitted.

Kaqchikel oral histories recall residents who appreciated public health officials’ efforts to educate them about typhus in Kaqchikel during Arévalo’s regime. Some elders recollected that Arévalo had visited their homes to talk about typhus.<sup>134</sup> Regardless of the veracity of such claims, their inclusion in oral histories reveals that Kaqchikel elders held Arévalo in high esteem for his anti-typhus campaigns. Such memories are a testament to the efficacy of deploying Indigenous brokers and languages in public health interventions.

Laid during the twilight of the Ubico dictatorship, the foundation for incorporating Indigenous language and culture into public health campaigns can be attributed to Dr. Epaminondas Quintana. In 1943, he proposed creating anti-typhus education materials in the four most widely spoken Indigenous languages: Kiche’, Kaqchikel, Mam, and Q’eqchi’. Noting that posters and records were the “most appropriate means to achieve indigenous comprehension [...] of contagion,” he explained, “the efficacy of flyers is nonexistent because the majority are illiterate.”<sup>135</sup> An *indigenista* who understood *indígenas*’ aversion to outsiders—particularly authorities—Dr. Quintana chided officials who did not respect *indígenas* and their contributions to public health.<sup>136</sup> Yet despite his progressive approach to indigeneity and public health, Dr. Quintana was not immune to racist beliefs. Portraying Indigenous languages as lacking sophistication and complexity, he classified them as “*lenguas vernáculas*” (vernacular tongues), “*lenguaje[s] vocal*” (vocal languages), and “*dialect[s]*” (dialects).<sup>137</sup> By exalting Spanish-speakers as more intelligent and capable than their Indigenous counterparts, he adhered to notions of Spanish superiority.

Positive portrayals of the Arévalo administration’s public health initiatives in Kaqchikel oral histories and other evidence of engagement like Dr. Quintana’s efforts notwithstanding, even as the nation transitioned from dictatorship to de-

mocracy, denigrating images of *indígenas* persisted. President Arévalo explained that the anti-typhus campaign focused “on the indigenous race, because of the misery and lamentable hygiene in which they live.”<sup>138</sup> In 1945, the anti-typhus campaign director insisted: “The illiteracy of *our* indigenous race and the high percentage also of ladinos, makes the fight against typhus very difficult. One sees that in all the infected areas and especially in [the primarily indigenous] department of Huehuetenango where the lack of roads also obstructs” progress.<sup>139</sup> Recognizing illiteracy and insufficient infrastructure as obstacles to better health, he paternalistically referred to “*our* indigenous race” and situated typhus as particularly virulent in the highlands where *indígenas* predominated. “As is well known by all doctors and erudite individuals, typhus is an endemic disease not only in Guatemala where the indigenous race predominates, but also in many countries of the world where for life circumstances, unnatural masses of people, poverty, etc. the observance of essential hygiene regulations declines.”<sup>140</sup> While he attributed typhus and poor hygiene in other nations to poverty and urbanization, in Guatemala he associated the disease with illiteracy and deficient infrastructure “where the indigenous race predominates.”

## Conclusion

Ecuadorian and Guatemalan officials deployed hygienic determinism and cultural essentialism to frame *indígenas* as incubators and vectors of infectious diseases related to poverty and poor hygiene, which in turn, deflected attention from the systemic rural poverty that undermined *indígenas*' ability to maintain their wellbeing. Although starker in Guatemala than Ecuador, unequal distribution of resources (particularly land) were among the root causes of poverty that elites and authorities sought to obscure. Instead of redistributing resources more justly, Guatemalan and Ecuadorian elites used spurious claims to insist on how modernizing (ie. changing) *indígenas*' customs and behaviors would improve their welfare. By identifying indigeneity rather than poverty as the primary catalyst of illness, Guatemalan and Ecuadorian authorities masked the very unequal distribution of resources that often undermined Indigenous health.

When poverty undermined the ability of rural *indígenas* to keep their bodies and homes clean, for example, authorities and officials portrayed them as dirty, diseased retrogrades. Thanks to better methods and engagement (such as public health messaging directed at them in their language), Ecuadorian *indígenas* were less likely to be stigmatized as vectors of disease than their Guatemalan counterparts. Ecuadorian officials were also more likely to attribute ill health to poverty and insufficient potable water and sewage systems, rather than to

Indigenous people and rituals alone. In Guatemala, the medicalization of racism was more malevolent: elites, authorities, and journalists frequently blamed *indígenas* for their own ill health.

In both Ecuador and Guatemala, some public health officials celebrated Indigenous ingenuity and diligence that buttressed public health while others at least did not fault *indígenas* for epidemics. But such valuation (or lack of disparagement) of *indígenas* was intermittent at best. Sigchos *indígenas* impressed one Ecuadorian inspector with their smallpox inoculation technique, but his counterpart Dr. Jeráud ignored that prophylactic procedure and attributed a typhoid outbreak to their “manner of living, customs, etc.” Jeráud’s successor radically reversed the narrative yet again when he praised Indigenous residents for helping to eradicate the epidemic. At times the spectrum of perceptions that ranged from lauding to discounting Indigenous people, languages, customs, and behaviors manifested itself in a single person, as the example of Guatemalan Dr. Epaminondas Quintana demonstrates. The varied, complex, and shifting assessments and framings of *indígenas* by Ecuadorian and Guatemalan public health professionals suggests that such evaluations were grounded more in personal experiences and (often racist) discourse than in medical science.

## Notes

1. Cornelio Sáenz Vera, “Campaña antipestosa intensivo en la provincia de Chimborazo (Ecuador),” *Boletín de la Oficina Sanitaria Panamericana*, 22:10 (1943), p. 881.
2. *Ibid.*, p. 881.
3. I am grateful to Jeremy Greene for proposing the idea of hygienic determinism.
4. Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004).
5. Humans can also become ill by handling an animal infected with bubonic plague. Kim A. Clark, *Conjuring the State: Public Health Encounters in Highland Ecuador, 1908–1945* (Pittsburgh: University of Pittsburgh Press, 2023); Centers for Disease Control, “Plague,” <https://www.cdc.gov/plague/index.html>, last accessed October 5, 2023.
6. Doctor Carlos Catalán Prem, “El tifus exantemático en Chimaltenango,” *Boletín Sanitario de Guatemala*, XI:48 (1940), p. 138. Although much scholarship focuses on typhus as disease of war (see, for example, John McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1620–1914* [Cambridge, UK: Cambridge University Press, 2010], pp. 285, 295), typhus also ravaged peacetime communities.
7. Museo de Medicina (MM), Quito, Ecuador, Sanidad (SA) 0734, Servicio Sanitario Nacional Cotopaxi, Latacunga, August 1, 1945. Early twentieth-century Mexican officials similarly associated poor *indígenas* with typhus. See Ryan Alexander, “The Fever of War: Epidemic Typhus and Public Health in Revolutionary Mexico City, 1915–1917,” *Hispanic American Historical Review*, 100:1 (Feb. 2020), pp. 63–92.
8. MM, SA0876, Gobierno de Ecuador, to Director General de Sanidad (DGS) from Dr. J. M. Espinosa, Ibarra, June 8, 1936. Similarly, late nineteenth- and early twentieth-century

- Colombians portrayed leprosy as an indigenous disease. See Abel Fernando Martínez Martín, *El lazareto de Boyacá: lepra, medicina, iglesia y estado, 1869–1916* (Tunja: Universidad Pedagógica y Tecnológica de Colombia, 2006).
9. MM, SA 0734, comunicaciones enviadas, Gualsaquí, Otavalo, Inspector Enrique Garcés, June 10, 1945.
  10. Raymond John Mckiernan-González, *Fevered Measures: Public Health and Race at the Texas-Mexico Border, 1848–1942* (Durham, NC: Duke University Press, 2012), pp. 167, 269; Daniel A. Rodríguez, *The Right to Live in Health: Medical Politics in Postindependent Havana* (Chapel Hill: University of North Carolina Press, 2020), p. 201; Ann Zulawski, *Unequal Cures: Public Health and Political Change in Bolivia, 1900–1950* (Durham, NC: Duke University Press, 2007), pp. 41–43, 75; Martha Few, *For All of Humanity: Mesoamerican and Colonial Medicine in Enlightenment Guatemala* (Tucson: University of Arizona Press, 2015), pp. 62–64; Marcos Cueto, *The Return of Epidemics: Health and Society in Peru during the Twentieth Century* (Aldershot, UK: Ashgate, 2001), p. 55; Rocio Gomez, *Silver Veins, Dusty Lungs: Mining, Water, and Public Health in Zacatecas, 1835–1946* (Lincoln: University of Nebraska Press, 2020), pp. 19, 24, 160–62.
  11. Rockefeller Archive Center (RAC), Sleepy Hollow, NY, Rockefeller Foundation (RF) Photographs, series 317, box 85, folder 1709, El tambor—subject with severe case of hookworm, dirt-eater, Dr. Rowan, 1915. Josué de Castro debunks cultural depictions of geophagy, see *The Geopolitics of Hunger* (New York: Monthly Review Press, 1979).
  12. Alexandra Minna Stern, “Buildings, Boundaries, and Blood: Medicalization and Nation-Building on the U.S.-Mexico Border, 1910–1930,” *Hispanic American Historical Review*, 79:1 (February 1999), pp. 64, 67.
  13. Stern, “Buildings,” p. 66.
  14. RAC, RF Photographs, series 317, box 85, folder 1709, Type of “excusado” being built on finca Las Mercedes, Dr. Rowan, 9-7-15.
  15. Steven Palmer, *Launching Global Health: The Caribbean Odyssey of the Rockefeller Foundation* (Ann Arbor: University of Michigan Press, 2010), p. 137.
  16. Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race & Hygiene in the Philippines* (Durham, NC: Duke University Press, 2006), p. 104-29.
  17. *Memoria de las labores [trabajos] realizados por la dirección general de Sanidad Pública y sus dependencias [henceforth MSP] en 1933* (Guatemala City: Tipografía Nacional, 1933), p. 346.
  18. *MSP 1933*, p. 501.
  19. *Ibid.*, p. 612. Social medicine is an integrative focus on economic, political, and social causes of disease that generally recognized that inadequate housing, sanitation, and potable water (among other socioeconomic factors) undermined individual health and fostered epidemics. See Anne-Emanuelle Birn, “O nexo nacional-internacional na saúde pública: O Uruguai e a circulação das políticas e ideologias de saúde infantil, 1890–1940,” *História, Ciências, Saúde—Manguinbos*, 13: 3 (2006), pp. 675–708; Eric C. Carter, “Social Medicine and International Expert Networks in Latin America, 1930–1945,” *Global Public Health*, 14:6–7 (2019), pp. 791–802; Howard Waitzkin, et al., “Social Medicine Then and Now: Lessons from Latin America,” *American Journal of Public Health*, 91:10 (October 2001), pp. 1592–1601; Johann van Reenen, “What Is Social Medicine? The US-European Perspective,” 2008, [http://digitalrepository.unm.edu/lasm\\_cucs\\_en/138](http://digitalrepository.unm.edu/lasm_cucs_en/138); Matthew R. Anderson, Lanny Smith, and V.W. Sidel, “What Is Social Medicine?” *Monthly Review* (January 1, 2005), <http://www.monthlyreview>.



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