

Injecting Modernity: Regulating Hygiene in Porfirian Oaxaca, Mexico

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By

Rebecca Ann Dufendach

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ABSTRACT OF DISSERTATION

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Abstract

Public hygiene discourse in Europe during the 19th and 20th centuries positioned the human body as an object requiring hygienic treatment. In Oaxaca, Mexico the legislation designed to “inject modernity” functioned as a tool to control the lives of the socially and politically “unhygienic”. Despite moves towards “modernity” made by elites, vaccine legislation was not effective tool because the agency of the popular classes and peasants of Mexico reshaped the vaccination projects according to their local situation. This thesis discusses the vaccination program as an emblem of elite efforts to “modernize” and “hygienize” the bodies of ordinary Oaxaqueños. I show, through my reading of their communications with the state government, how local *jefes politicos*, political officials in charge of rural districts, and those enlisted to perform in the vaccination projects, agents or propagators of the vaccine, were able to influence, negotiate, and reject the aims of “modernity”.

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Injecting Modernity: Smallpox Vaccinations in Porfirian Oaxaca, Mexico

Introduction

"Nowhere is this irony-the undemocratic foundations of 'democracy'-more visible than in the history of modern medicine, public hygiene, and personal hygiene, the discourses of which have been central in locating the body of the modern at the intersection of the public and the private (as defined by, and subject to negotiations with the state)."¹

-Dipesh Chakrabarty, 1992

Public hygiene discourse in Europe during the 19th and 20th centuries positioned the human body as an object requiring hygienic treatment. The term hygiene refers to the culturally situated science of hygiene and the practice and condition of cleanliness to reduce the spread of disease causing pathogens. Hygienists and scientists in Europe (especially France) developed medical knowledge that provided a rationale to scrutinize public and private hygiene.² In Mexico, smallpox vaccinations provided a rationale and western scientific procedure that the elite medical and governmental community used towards their goal of gaining greater control over the bodies and intimate lives of its citizens.

Edward Jenner developed the smallpox vaccine in 1796 which transformed relations between national drives for public health and the private control over the conditions of a person's body. Vaccinations served as a marker of the junction of the human body and the social, cultural, and political processes of "modernity". The regime of modern scientific knowledge furnished western powers with tools to literally inject "modernity" into "traditional" peoples.

² See Jules Rochard, "Le'Hygiène en 1889," *Le Revue des Deux* 96, November-December, 1889, pp: 54-85, and in Mexico Francisco Bulnes, "Tres Razas humanas," 137-58 and Maqueo Castellanos, "Algunos problemas nacionales," 93.

Vaccinations represented an intimate intrusion into the body and in Mexico attempted to make the private body open to public control in the name of the “modernization project”. In 1803 colonial officials in Spain dispatched teams to the colonies to promote vaccinations as a method of attaining a hygienic populace of laborers for Spanish colonial projects. During the 19th and 20th centuries Mexican government officials were able to legislate obligatory vaccinations in efforts to “modernize” the nation. The state governments, in this case the state of Oaxaca, adopted this framework and assumed responsibility for transforming all Oaxaqueños into a clean and hygienic citizenry. Scientific hygiene developed in Mexico as a part of the “politico-cultural transformation called modernization that the country underwent during the years of Porfirian stability.”³

Under the leadership of Porfirio Díaz from 1877 to 1911, the formation of public hygiene offices and projects in Mexico was “intimately related to changing economic and socio-political scenarios.”⁴ The Porfiriato in Oaxaca represented a time of economic development by foreign investment and the consolidation of centralized power of the state. Oaxaca, a state in the south of Mexico, was a place where elites and commoners negotiated the “practices of envisioning and ordering the state”⁵ during a time of political stability and economic boom. These developments were born from the thinking of 19th century Latin American elites who “equated the expansion of infrastructure with the advance of capitalism and civilization, and rural and indigenous peoples

³ Mauricio Tenorio-Trillo. *Mexico at the World's Fairs: Crafting a Modern Nation*. University of California Press: Berkeley, 1996. p. 147.

⁴ Patricio V Marquez, Daniel J. Joly, “A Historical Overview of the Ministries of Public Hygiene and the Medical Programs of the Social Security Systems in Latin America.” *Journal of Public Hygiene Policy*, Vol. 7, No. 3. (Autumn, 1986) pp. 378-394. p. 378

⁵ Mark Overmyer-Velásquez. *Visions of the Emerald City: Modernity, Tradition, and the formation of Oaxaca, Mexico*. Durham: Duke University Press, 2006. p. 2.

with barbarism.”⁶ Elites believed that “modernization” of public hygiene could only be achieved by inspecting and controlling the spaces of the popular classes through legislation.

In Oaxaca the legislation designed to “inject modernity” functioned as a tool to control the lives of the socially and politically “unhygienic”. Elites were those with interests in business, mines, finance, and real estate who tended to be foreigners from Europe or *criollos* who were born in Spain or of Spanish ancestry born in Mexico. They envisioned an urban, industrial, and hygienic Oaxaca and the popular classes, according to elites, displayed none of these characteristics. Behind the forceful “modernity” of the Porfirato lay the value judgments that were attached to endemic smallpox in Oaxaca, and the realization of public hygiene projects assumed an ethical and socially progressive function. Hygiene efforts constructed by elites advocated vaccines as a means for the people to become modern free of “physical and moral contagions.”⁷ The politics of “hygiene” underscored the moral stance of Oaxaqueño elites and provided a rationale to enter and regulate the private spaces of common people.

For the elites of Oaxaca the “modernity” they “fervently sought signified nothing less than the “de-Indianization” of the nation.”⁸ Porfirian hygienicists proposed that a “modern” nation needed hygienic spaces and medicine however the issue of race hindered their efforts. Elites during the Porfirato subscribed to “long-standing identification of the Indians with miasma and dirt that neither Western exoticism nor scientific hygienism could overcome.”⁹ Despite moves towards “modernity” made by elites, vaccine legislation was not an effective tool because

⁶ Francie R. Chassen-López. *From Liberal to Revolutionary Oaxaca: The View from the South, Mexico 1867-1911*. University Park, Pennsylvania: Pennsylvania State University Press, 2004. p. 47.

⁷ Overmyer-Velázquez, *Emerald City*, p. 66.

⁸ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 291.

⁹ Tenorio-Trillo, *Mexico World's Fairs*, p. 156.

the agency of the popular classes and peasants of Mexico reshaped the vaccination projects according to their local situation.

This thesis discusses the vaccination program as an emblem of elite efforts to modernize and “hygienize” the bodies of ordinary Oaxaqueños. Elites openly offered an “injection” of “modernity” and the populace reacted with insubordination and ignorance. Official government documents and letters highlighted the exchange between state legislation and popular reaction. The exchanges represented the plane of negotiation concerning vaccinations and proved contested applications of “modernity”. These interactions are the focus of the analysis of resistance because they not only redefine the visions of elites and actions of ordinary citizens but also “helped to redefine the balance of forces among them.”¹⁰ The popular classes of Oaxaca subverted, interpreted and re-shaped the application of the vaccines.

The term “popular class” used here refers to a wide variety of ethnicities and consisted of the people of Oaxaca who worked in mines, agriculture, or craft industry community based living that often lived in rural districts. The residents of Oaxaca’s rural villages generally lived according a cyclical time of agriculture and lived according to collective identities with each town where the land property was “held in common and natural resources available to its members.”¹¹ Ethnicity in Oaxaca ranged from sixteen different identifications and represented a fluid form of identity and community. Individuals and communities contested the meaning and implementation of the vaccinations and were able to shape the realization of this part of the modernity project in Oaxaca. According to Historian Chassen-López, these villages were the influenced by “modernity projects” in a drastic way and that “no other sector of society suffered

¹⁰ Florencia E. Mallon. “Reflections on the Ruins: Everyday forms of State Formation in Nineteenth-Century Mexico.” *Everyday Forms of State Formation: Revolution and the Negotiation of Rule in Modern Mexico*. Gilbert M. Joseph and Daniel Nugent, eds. Duke University Press: Durham, 1994. p. 70.

¹¹ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 285.

more under the modernization policies of its native sons than the indigenous people of Oaxaca.”¹²

Indigenous villages in Oaxaca evaluated vaccination projects proposed by elites with skepticism for a variety of reasons. These include widespread suspicion of the sterilization due to inadequate communication about the purpose of the vaccine, lack of properly trained personnel, and poor funding. The people of Mexico City reacted with fear and mistrust when first introduced to the practice of inoculation in 1779.¹³ The atmosphere of doubt surrounding vaccinations interfered with public hygiene efforts and “popular resistance further complicated the effective application of inoculation.”¹⁴ In rural areas of Oaxaca lack of medical personnel contributed to popular misgivings about vaccinations, and similarly in another Mexican state called Guanajuato, Thompson stated that even the capital city had no physicians to perform the operation until one was sent to Mexico City to learn it.”¹⁵ This paper demonstrates some similarities between the problems of the vaccination project presented by Thompson in Guanajuato and the obstacles of smallpox vaccinations in Oaxaca.

I begin with a brief examination of preliminary hygiene measures in Mexico because vaccinations only one part of a larger hygiene project. Germ theory provided the scientific foundation of the modern hygiene care system in Mexico and the legislation of public hygiene projects pivoted on elite visions of a “modern” country. These elite visions exceeded the capacities of the hygiene infrastructure available in many states, vaccinations, as part of a larger program towards “modernization” met with difficulty due to the overextension of already

¹² Ibid. p. 277.

¹³ Donald Cooper. *Epidemic Disease in Mexico City, 1761-1813*. Austin: University of Texas Press, 1965, pp. 56-69.

¹⁴ Angela T. Thompson, “To Save the Children: Smallpox Inoculation, Vaccination, and Public Hygiene in Guanajuato, Mexico, 1797-1840.” *The Americas*. Vol. 49, No. 4 (Apr., 1993) p. 436.

¹⁵ Ibid. p. 441.

strained resources and personnel. The success, according to elites, of public hygiene efforts such as vaccinations was achieved by unquestioned compliance with legislation. However, as Thompson shows in her study of vaccinations in Guanajuato, “while the initiatives for public health programs came from various levels of government, ranging from imperial to local, successful immunization depended upon what happened at the local level in the villages, towns, and provinces.”¹⁶

Vaccination projects facilitated the centralization of governmental power through bureaucratic communication, a mainstay of projects of “modernization”. The vaccine programs encouraged centralized bureaucratic power over the more isolated districts of Oaxaca through functionary approvals of a course of action and vaccination reporting requirements. Elites, the business and governmental officials, also asserted their moral authority as justification for the vaccination projects. Elites helped shape the state’s dominant authority through legislation and public policy visions of “modernity” that included the centralization of governmental power and an expansive and integrated economy open to foreign investment. The actions of elites to meet “modern” standards consisted of improving infrastructure, abolishing regional power bases in favor of centralized power, and eliminating “regional tariffs which opened up the national market.”¹⁷ Use of the vaccinations across Mexico served to strengthen the nation building process and reinforce the centralized authority of the state. In Mexico where formulation of nationalistic ideology and industrial development were dependent on state sponsorship “hygiene indisputably became a state matter.”¹⁸

¹⁶ Ibid. p. 433.

¹⁷ Harry E Vanden, Gary Prevost, eds. *Politics of Latin America: The Power Game*. Oxford: Oxford University Press, 2002. p. 292.

¹⁸ Tenorio-Trillo, *Mexico World's Fairs*, p. 155.

In fact, Mexico had suffered from repeated outbreaks of cholera, yellow fever, and smallpox epidemics, which not only decimated local populations, but also threatened the established authority of elites and confirmed the elite consensus that it governed a backwards, dirty, and impoverished populace. The 1797 smallpox epidemic in Mexico exposed the lack of preventative hygiene measures and prompted hygiene officials to seriously address the issue of systematic vaccinations. The appearance of epidemics exacerbated the lack of medical infrastructure during the period when elites claimed to bring “modern medicine, hygiene, and hygiene to”¹⁹ more rural parts of Latin America.

Public hygiene efforts in Mexico from colonial times had been based largely upon philanthropy of church institutions and programs, but in the 19th century governmental agencies were formed in an attempt to effectively implement the vaccine. Sanitary councils and regulatory hygiene laws from 1826 to 1877 outlined important issues for sanitation in Mexico. Later, under the dictatorship of Porfirio Díaz, “sanitation and welfare programs were reactivated.”²⁰ The reactivation of public hygiene was based upon the needs of a “modernizing” populace through industrialization, urbanization, and hygienic regulation. Efforts to vaccinate the population of Oaxaca form the basis of my analysis, but I will also examine other hygiene endeavors and governing bodies that affect the larger community. These social regulatory programs served the elite visions and social security and “served as an important mechanism of social control.”²¹ Urban centers of Europe and the United States supplied the ideal image of “modernity” and elites and legislators used vaccines as tools to enforce their idea of a “modern”

¹⁹ Charles L Briggs. “Modernity, Cultural Reasoning, and the Institutionalization of Social Inequality: Racializing Death in a Venezuelan Cholera Epidemic.” *Comparative Studies in Society and History*. Vol. 43, No. 4. Oct., 2001. p. 666.

²⁰ Daniel Lopez-Acuña, “Hygiene Services in Mexico” *The Journal of Public Hygiene Policy*. Vol. 1, No. 1. Mar., 1980. p. 84.

²¹ Patricio V. Marquez and Daniel J. Joly. “Ministries of Public Hygiene.” *Journal of Public Hygiene Policy*. Vol. 7, No. 3. (Autumn, 1986) p. 390.

Mexico. Legislation efforts to apply hygienic standards to the human populace resulted in attempts to control the environment of urban centers and enforce ideals of cleanliness in the private sphere.

Councils made up of doctors, medical professionals, and other high status members of Oaxaqueño society organized plans for disinfection of disease in urban and rural spaces. These councils also identified sources of contagion in unhygienic conditions under this rationale that all public and private spaces were available for scrutiny and regulation. The hygiene measures enacted by elites “became an instrument through which, in the name of the collective hygiene of the city, public hygiene officials aimed to alter the private lives, practices, customs and behaviors of the urban population”²² The “modernization” project of vaccinations in Oaxaca failed to take into account discrepancies between the visions of the elites and the actual resources and potential for popular resistance and negotiation found in local administration of the vaccine. The vaccination projects met bureaucratic, monetary, and personnel obstacles and these show not only the frustrations of elites but also the negotiations of its agents.

This paper begins by examining smallpox and the colonial efforts to treat it. I then look at how public hygiene infrastructure in Mexico City moves south to Oaxaca. I use the papers of Oaxaqueño societies that focused on public hygiene and the legislation passed in Oaxaca concerning the procedure of the vaccine to examine the position of the elite. I also show how legislation passed during this period scrutinized bodies and private spaces. These goals were not unilaterally achieved or accepted by the people of Oaxaca. I show, through my reading of their communications with the state government, how local *jefes politicos*, political officials in charge of rural districts, and those enlisted to perform in the vaccination projects, agents or propagators

²² Claudia Augostoni. *Monuments of Progress: Modernization and Public Hygiene in Mexico City, 1876-1910*. University of Calgary Press: Calgary, 2003. p.71.

of the vaccine, were able to influence, reform, and reject the aims of “modernization”. Letters between state and local governments of rural districts form the basis to look at the popular classes and their abilities to negotiate the implementation of the vaccines in their districts of Oaxaca.

Critical Approach

This paper does not deny the use of vaccines in disease prevention. It hopes to place vaccines within the larger context of Porfirian Oaxaca as a larger socio-political effort to rapidly modernize the people of Mexico.

Historian Mark Overmyer-Velázquez has shown how Oaxaca de Juárez was an “important site Mexico’s encounter with modernity at the turn of the century”²³ contrary to the dominate depiction of Oaxaca as a traditional “backwater” of Mexico that experienced no efforts to “modernize”. I examine the interaction of elites and the popular classes within this time period, and hope to show the importance the distinctive “modernization” process for Oaxaca.

I examine the tangible steps taken towards “modernization” in the form of hygiene projects and sanitary regulations. Claudia Agostoni shows that the construction of these works “embodied materially and symbolically the confidence of an era of order and progress in a context of a largely non-modern society.”²⁴ Her work provides a window into the beginnings of public hygiene in the capital and in particular the importance of hygienists and their recommendations for a “clean and hygienic” city.

Foucault presented a powerful tool of analysis to situate vaccinations in Oaxaca within a power discourse. He looked at “bio-power” as a means of dissecting and cataloging “the body,

²³ Overmyer-Velázquez, *Emerald City*, p.2.

²⁴ Agostoni, *Monuments of Progress*, xii.

health, modes of subsistence and habitations, living conditions, the whole space of existence.”²⁵

This theory of power can be used conversely to examine the strategies by which the ordinary people of resisted and negotiated vaccinations and maintained self-determination.

My analysis of the negotiation between the state and the popular classes is informed by James Scott and his look “everyday forms of resistance” mobilized by peasants. In addition, essays presented by Gilbert M. Joseph and Daniel Nugent have shown the negotiation utilized to contest in “everyday forms of state formation.”²⁶²⁷ These authors have exhibited how small negotiations, such as those presented in the letters between districts and the state government; represent the confrontation and compromise of “modernity”. The negotiations took the form of rumor, lack of materials, and personnel issues. The people of Oaxaca circulated the rumor that the smallpox vaccine would induce sterilization, as shown in correspondence in 1893. *Jefes politicos* also mobilized the bureaucratic exchange to bemoan their lack of necessary vaccination materials to properly implement vaccinations. Letters written by these local authorities also protested the vaccination project by claiming lack of willing agent to carry out the vaccinations. These challenges to the elite “project of modernity” stemmed from the hygiene discourse and in particular the efforts to treat the smallpox epidemics in Oaxaca.

Smallpox and its Treatments

Smallpox is a highly contagious virus caused by *variola major*. It was spread only through human contact either in the air by inhalation of saliva droplets, or direct contact with smallpox contaminated cloth. Once contracted, the virus incubates for 7 to 9 days until the

²⁵ Michael Foucault. *The History of Sexuality Vol 1: An Introduction*. New York: Vintage Books, 1980. pp.143-44.

²⁶ James Scott. *Weapons of the Weak: Everyday forms of Peasant Resistance*. New Haven: Yale University press, 1985.

²⁷ *Everyday Forms of State Formations: Revolutions and the Negotiations of Rule in Modern Mexico*. Gilbert M. Joseph and Daniel Nugent, eds., Durham, NC: Duke University Press, 1994.

person becomes ill and complains of body ache, chills, or nausea. In the following days the person will develop the characteristic rash of flat reddish lesions. Within the next week the lesions will fill pus then scab over and fall off of the body. These pox cause great pain and burning and the lesions leave a pock mark scarring skin, particularly the face. Before inoculations, smallpox caused many fatalities and often blindness.

The common remedies available in the 18th centuries were the quarantine the victim or according to humoral theories, prescribe “red therapies” exposing the victim to red clothing and objects. The introduction of inoculations did not eliminate humor or miasmatic theories. Inoculation or variolization consisted of using the pus from more mild cases and rubbing it into the open wound of another person. The person would then develop smallpox with little or no scarring and develop immunity. In 1789 Edward Jenner developed a smallpox vaccine using the mild virus of cowpox. He used a less harmful strain of cowpox to develop a vaccine in 1789 which effectively immunized people against smallpox. Variolization provided immunity to smallpox, but Jenner’s cowpox vaccine “entailed no risk of spreading smallpox to other persons in the community.”²⁸ The vaccination used first in Latin America was called *brazo a brazo* and was the basis for some of the first public hygiene missions to the Spanish colonies. The procedure consisted of taking pus from the cowpox lesion and injecting it into arm of another. In this way the cowpox vaccine was “transported from Spain to Central and South America using the arm-to-arm method.”²⁹

Death by disease was a common occurrence within the Spanish Empire, epidemics brought about the “Great Dying” from 1520 to 1600 which decimated the Indigenous

²⁸ Donald R Hopkins. *The Greatest Killer: Smallpox in History*. Chicago: University of Chicago Press, 2002. p. 43.

²⁹ Ann Jannett. *The Vaccinators, Smallpox, Medical Knowledge, and the “Opening” of Japan*. Stanford, Stanford University Press, 2007. p.45.

populations of what is now Mexico. Mexico's indigenous population paid the price for the "dangerous privilege of longest isolation from the rest of mankind."³⁰ Colonial expansion spread more disease along paths of migration and Europeans brought three successive epidemics to "New Spain", "the initial wave of smallpox, begun in 1519, the *cocolitzli* (cholera) epidemic of 1545-8 and the *matlazahuatl* (typhus) epidemic of 1576-7."³¹ These epidemics became a part of life in the Valley of Mexico as smallpox "culled the population of the Valley of Mexico at regular intervals: in 1727-8, 1736-41, 1778-80."³² For many Spanish administrators the susceptibility of the Aztec and Incan peoples to European pathogens served as evidence of moral superiority. Although, the colonies provided economic benefits and the Spanish embarked on the task to provide some semblance of public hygiene care across their colonies.

Colonial Control: Vaccinations in New Spain

The historical background of vaccinations in Latin America provided the blueprint for future public hygiene measures. Vaccinations began within the social and political context of colonialism. Colonial officials rendered vaccinations as an elite form of knowledge that must be applied to the reluctant masses of the colonies. These value judgments established a power dynamic that divided elite goals from the masses of ignorance. Spanish colonial administrators realized the importance of a hygienic populace to maintain the economic viability of their investments in the colonies and mobilized imperial control in the form of vaccinations. Smallpox devastated the populations of the Spanish colonies eventually forced Spain to implement public hygiene measures. The colonial power was motivated by a desire for a hygienic labor population and used the smallpox vaccine as one step to control the populace.

³⁰ Alfred W Crosby. *The Columbian Exchange: Biological and Cultural Consequences of 1492*. Greenwood Publishing: Westport, 1972. p. 37.

³¹ Alan Knight. *Mexico: The Colonial Era*. Cambridge: Cambridge University Press, 2002. p. 21

³² *Ibid.* p. 206.

The Spanish probably brought smallpox to their mainland colonies by way of slave ships. Throughout the 16th and 17th centuries smallpox outbreaks attacked the populations of Mexico City killing thousands. The small pox epidemic of 1797 to 1798 “claimed the life of one out of every sixteen inhabitants of the capital which had a population of approximately 125,000 persons.”³³ The Spanish Court recognized the importance of distributing the vaccine in order to maintain a steady supply of labor for the colonial production. Spain used vaccinations to control and improve the economic viability of its colonies. In 1803, Francisco Xavier de Balmis was chosen to lead the expedition, approved by Carlos IV, to bring the vaccination techniques to the colonies. They would equip ships that would “carry cows infected with cowpox, a sufficient number of young boys for successive vaccination during the trip, and a quantity of vaccine sealed between glass slides.”³⁴ These measures ensured that some form of the smallpox vaccination would reach colonial shores.

The rationale behind these original vaccination projects was a product of political and social imperialism for the economic benefit of Spain. The Spanish crown acknowledged the epidemics as the number one cause the devastation of the population of the Americas. Balmis represented the Spanish empire as a propagator of the smallpox vaccine in the colonies. Marqués de Bajamar, the Governor of the Council of the Indies in Spain noted that the epidemics killed off one third to one-half of people in the colonial provinces and “as a result the decreased population, tribute diminished, commerce stagnated, fields lay unattended, and mine production declined with consequent reduction in royal income.”³⁵ The basis for these projects was to

³³ Donald R. Cooper. *Epidemic Disease in Mexico City 1761-1813: An Administrative, Social, and Medical Study*. Austin, University of Texas Press, 1965. p. 154.

³⁴ Michael M. Smith. "The “Real Expedición Marítima de la Vacuna” in New Spain and Guatemala” *Transactions of the American Philosophical Society*. Vol. 64, No. 1. (1974), pp. 1-74. p.14.

³⁵ *Ibid.* p.15.

maintain a hygienic working populace to produce for the wealth of Spain. The agents of the expeditions, Spanish Doctors of the Medicinal School of Cadiz, were in the position to experiment and to an extent, control the populations on which they vaccinated. When speaking about the importance of maintaining reserve of vaccine Marqués de Bajamar wrote:

“America is less enlightened [than Europe] and the character of its natives is commonly indolent. They look upon even the greatest benefit that outsiders propose for them with the greatest suspicion. They prefer to follow their erroneous ways and fall victims to deadly epidemics rather than accept the remedies which physicians commissioned by the leaders of the American dominions offer them. . . .America, I repeat, requires the closest study and care in order to propagate successfully this great gift, especially since it is difficult for natives to accept what their elders did not know. Therefore the Superior Government must rely upon the venerable parish priests, local officials, and physicians . . . to maintain the precious preservative in deposit and distribute it among these inhabitants”³⁶

The precedent for public hygiene projects was set by Spanish doctors looking to clean up colonial populaces for the economic benefit and in support of moral superiority. Balmis became very frustrated at the “indolent” populace, and their ignorance in disregarding the importance of immunizing their children. In addition to many vaccinations, the expedition established a Central Vaccination Board in Mexico City in 1804, which would maintain a steady supply of vaccine, and would dispatch a physician in case of an alert of an epidemic in surrounding provinces.

The wide distribution of the vaccine as a prevention measure in Mexico radically changed the face of the bureaucracy from Mexico to Oaxaca City and helped to place the Spanish Empire at the “vanguard of early modern state-making, building bureaucracies as it

³⁶Spanish translated by Smith, Balmis to Iturrigaray, Mexico, 5 Septiembre 1804, AGN, "Epidemias," v. 10, exp. 7, fs. 81v in "Real Expedición Marítima de la Vacuna." p. 16.

established colonies.”³⁷ This emerging bureaucracy had the opportunity to influence emerging Latin American states. The Spanish Viceroy Branciforte of the Mexico City issued a circular that outlined the necessary procedures. Published on February 28, 1797, it included a thirteen-point decree which demanded that along with designated agents of the project that the “Towns were to be divided into districts under the charge of *regidores* (councilors), minor city officials, and leading citizens who would coordinate hygiene services in each area.”³⁸ These directives placed the power of execution of the vaccination projects into the hands of the Mexican elites. This circular was only the very beginnings of efforts to make Mexico a hygienic country.

The Superior Hygiene Council of the Department of Mexico was created January 4, 1841 to oversee the public hygiene policies for the Capital City and to communicate with all Mexican states. The Council was advised the “government on sanitation concerns and to regulate the practice of medicine by establishing examinations and licenses.”³⁹ Intrinsic in the ideas of progress desired in the 1900’s was the use of public hygiene to ensure the economic and social “modernization” in Mexico. Medical research on the prevention of disease prompted by germ theory was slowly translated to legislation. Older theories such as miasmas, or “bad air” ideas about the spread of diseases were gradually replaced in Mexican medical practice, as disease causation was assigned to bacterial knowledge. In Mexico, this knowledge was put at the forefront of progressive legislation and vaccinations were transformed into a tool of “modern hygiene. This legislation focused upon preventative measures such vaccines and required that “state involvement was not limited to times of crisis”⁴⁰

³⁷ Irene Silverblatt. “Colonial Conspiracies.” in *Ethnohistory*, 53:2, Spring 2006. p. 259.

³⁸ Spanish, Spain, Circular, Mexico, 28 Febrero 1797, *Archivo General de la Nacion*, "Epidemias" v. in Smith, "Real Expedición Marítima de la Vacuna." p. 37.

³⁹ Tenorio-Trillo, *Mexico World's Fairs*, p. 147.

⁴⁰ Augostoni, *Monuments*, p. 21.

It was the Spanish then who instituted the first vaccinations as a tool of colonial rule, and colonial agents executed the project. The elites of Oaxaca were a small set of racially “pure” Spanish descendants and foreigners who viewed themselves as far from the majority of indigenous rural peoples. As part of a governmental hygiene effort, the vaccination projects represented the encounter between elites and a “large population of mixed-race people who had little interest in race as a category and little patience for the social and political pretensions of the elite.”⁴¹ Using these vaccination projects as a meeting point between these societal groups, this paper is able to show how Oaxaca peasants influenced the projects and how elites reacted and enforced their standards.

Constructions of “Modernity” in Porfirian Oaxaca

Representatives from the Mexican government attended international sanitary conferences in the early 1800’s, at which delegates “advocated the use of new preventative measures by stressing the need for the countries to translate recent medical advances into specific hygiene legislation and programs.”⁴² The application of the smallpox vaccine was written into legislation across Mexico during the Porfiriato, and the regulation of public and private hygiene was transformed by ideals of a modern country. Hygiene legislation was controlled by the elites and governing bodies of Oaxaca, and served to actualize the ideals of modernity that were concurrently developing in industrialization, urbanization, development of bureaucratic control and regulation of cleanliness. These efforts to control and regulate the people of Oaxaca met with much resistance despite the theory that the “smallpox vaccination is one of the success

⁴¹ Peter Guardino. *In the Time of Liberty: Popular Political Culture in Oaxaca, 1750-1850*. Durham: Duke University Press, 2005. p. 154.

⁴² A. A Moll. "The Pan American Sanitary Bureau: its Origin, Development and Achievements. A Review of Inter-American Cooperation in Public Hygiene Medicine and Allied Fields," *Bulletin of the Pan American Sanitary Bureau* 20, (194). p. 42.

stories of this period.”⁴³ The term “success” in this context however, must be qualified: I am to explore by what standards a project and for whose aims can the vaccination project be deemed successful.

Elites represented one set of the players who implemented vaccines in the state of Oaxaca. The elite by no means consisted of a homogenous group proposing a completely unified set of “modern” ideals, though by looking at their goals and interactions they did share a common ideal of modernity. The capital city of Oaxaca was ruled by a group of people named *la vallistocracia* from the geographical and social central positions of power focused in the hands of “merchants, liberal politicians, and European and North American Immigrants.”⁴⁴ The landed and business class remained in control of the government and formulated legislation according to their ambitions. The secular elite attempted to displace traditional hierarchies through reform and anti-clerical measures. *La reforma* of Oaxaca (1854-1861) allowed the state government to “confront the social problems of the country, problems that would not be resolved with the pen or by laws that were sent to regulate and systemize the new governments” and apply ideals of “modernity” to Mexican peoples.⁴⁵ Elite groups believed fiercely in the saving grace of “modernity” and “that those indigenous elements still clinging to tradition would be eliminated” as schools and hygiene projects would turn them into respectable Mexican citizens.⁴⁶ The political and social elite of Oaxaca saw progress through industrialization, urbanization, and a centralized bureaucratic structure. These factors, to Mexican elites, would create a middle class,

⁴³ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 419.

⁴⁴ Overmyer-Velázquez *Emerald City*, p.23.

⁴⁵ Margarita Dalton. *Breve Historia de Oaxaca*. El Colegio de México: Fideicomiso Historia de las Américas, Fondo de Cultura Económica, Mexico, 2004. p. 153 .

⁴⁶ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 47.

a clean population, and social mobility through which “modernity would reproduce itself effortlessly, even mechanistically, into the future.”⁴⁷

Industrialization was a main goal of the Oaxaqueño elite during the Porfiriato. Wielding their new power granted by the political turnover, reform became the buzzword for Oaxaqueño elites. The reform laws took various guises, but all worked to break down the enormous economic and regulating power of the church. The arrival of the Southern Mexican Railroad in 1892 constituted a symbol of industrialization in Oaxaca as the mining industry blossomed. This economic boom placed a great stress upon the leaders and the resources of Oaxaca, and the social development of Oaxaca came in fits and spurts. Public hygiene initiatives were spurred by economic needs as disease and quarantines wreaked havoc along trade lines.

In the late 19th and early 20th centuries Oaxacan industries included commercialized agriculture of tobacco, cotton and coffee; mining of industrial metals and fuels, and some modern manufacturing centers for textiles. The mines were small scale ventures made possible often by foreign investment. People of Oaxaca who worked in the mines and manufacturing faced a wage “discriminatory system that prevailed throughout the nation.”⁴⁸ Many laborers were indigenous peoples due to the location of the mines in the mountains of Oaxaca. Many workers in the capital city joined labor unions which “helped promote the state’s agenda of economic modernizations and prolonged elite control over the capital’s workforce.”⁴⁹ Notwithstanding, only a small percentage of the regions labor force were attracted to factories

⁴⁷ Robert M. Buffington, and William E. French. “The Culture of Modernity.” in the *Oxford History of Mexico*. Michael C. Meyer and William H. Beezley, eds. Oxford University Press: Oxford, 2000. p.399.

⁴⁸ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 205.

⁴⁹ Overmyer-Velázquez *Emerald City*, p.87.

and mines and craft and cottage industries persisted and were viewed by elites as impediments to the “development and expansion of region markets.”⁵⁰

Trade officials organized around the railroad aspired to allow open trade “unencumbered by the obstacles of frequent quarantines and for reduction in the debilitating infectious diseases that decreased the productivity of agricultural workers.”⁵¹ In Oaxaca the economy directly depended on the influx of foreign capital and “economic production expanded under the stimulus of external demand.”⁵² Representatives from Mexico attended International Sanitation conferences in the 19th and early 20th centuries which attempted to “establish uniform quarantine regulations in an effort to remove barriers to steam navigation.” Public hygiene efforts were often aligned with economic and industrial needs in modern Mexico. The dirt and disease that abounded within the mining and burgeoning industrial sectors of Oaxaca needed to be controlled and eradicated. A hygienic growing population was “indispensable for the economy and meant that the productive process was unaffected by disease.”⁵³

Despite efforts to modernize their economy and industrialize Mexico, the division of funds for federal and state purposes was very contentious. The unreliability of the new republic’s national treasury provoked the poor support or complete “derailment of all sorts of public and semipublic projects.”⁵⁴ Smallpox vaccination was one of the first projects of “modernization” which the government attempted to apply to all citizens of Oaxaca. Lack of funds prevented ambitious social projects such as the smallpox vaccination project from realization. The vaccination was literally a personal and intimate injection that represented a step

⁵⁰ Ibid. p. 82.

⁵¹ Marquez, Joly, “Ministries of Public Health” p. 390.

⁵² Ibid. p. 380.

⁵³ Augostoni, *Monuments*, p. 75.

⁵⁴ Stanley C. Green. *The Mexican Republic: The First Decade, 1823-1832*. Pittsburgh: University of Pittsburg Press, 1987. p. 154.

towards “modernity” for the people of Oaxaca. Roads and lines of communication across the state grew slowly, and required travel over rugged and mountainous terrain and proved a significant challenge to the logistics necessitated by the effective application of the smallpox vaccine.

Elite Visions: Regulating Hygiene in Oaxaca

The State Congress of Oaxaca presided directly over the capital district and would send its decrees’ and decisions to the *jefes politicos* of the other districts. *Jefes politicos* presided over their districts from a town *municipio, cabecera, or ayuntamiento* that designated the seat of government for the district. The vaccine projects dictated by elites stretched the limits of the governmental bureaucracy of the state. The vaccination projects demonstrate the importance of coordination and how they promoted the growth of civil servants. Most communications pertaining to the vaccines were in the form of circulars which functioned similar to those presented by Peter Guardino in his work on Guerrero from 1800 to 1857. The circulars in this case were constructed by elites in the capital and then a “single copy of a proclamation was addressed to as many as 20 or 30 villages, each of which signed the documents to acknowledge receipt and pass it on to the next in the chain.”⁵⁵ The extensive correspondence between agents in Oaxaca and other regions shows the difficulties of coordination in 19th century Oaxaca.

The political elites were aware that the circulars and laws they produced were for their own use, not for the largely illiterate populace. Therefore a colonial form of proclamations in towns and villages was maintained in independent Mexico. In Oaxaca, and outlying territories, a local official, “would parade around the principal square accompanied by an escort, a drummer,

⁵⁵ Guardino, *Peasants, Politics*, p. 159.

and a bugler. In each corner a secretary would read the law out loud.”⁵⁶ These examples show the development and connection of a Mexican bureaucracy with older forms of social communication and exemplify the “dynamics of the transition from colony to nation in that region of the world.”⁵⁷

State formation in the new Republic of Mexico was based upon the new order of secular civil servants. The *municipio* as a tool of the modern order and control over local resources affected Mexico’s rural poor populations. The *ayuntamiento* emerged as one of the most important institutions of Porfirian Oaxaca in practical and symbolic terms because they were the “intermediate role between the national state and the rural majority.”⁵⁸

The efforts to apply the smallpox vaccine in Mexico were crafted by elites, but Municipal control often gave “relatively poor people in rural Mexico leverage with which to shape laws as they were implemented.”⁵⁹ The ability of the *jefe politico* to accept or reject the demands of vaccination pointed to the agency of the lower classes. This agency is shown in the copious amount of correspondence between the Oaxacan capital government and the smaller *municipios*. The letters often claimed a loss of the vaccine lymph, not enough vaccine, or the complete refusal of local participation. The subtle ways used to avoid or undermine the vaccinations show the difficulties of the program and the agency of lower classes against the national agenda.

After independence, the city of Oaxaca established by decree its own Sanitary Commission in 1826 which reconnected the web of public hygiene bureaucrats named by the elites of the Oaxacan government. During this time, the commission was charged to use the funds of the state to take the necessary measures to deal with “epidemics and other pests in any

⁵⁶ Guardino, *In the Time of Liberty*, p. 163.

⁵⁷ Thompson, “Smallpox...” p. 455.

⁵⁸ Guardino, *Peasants, Politics*, p. 87.

⁵⁹ *Ibid.* p. 108.

part of the state that spread and represent a dire threat”⁶⁰ It is significant that the decree places all financial responsibility on the state treasury and allows the commission to “take the funds that will be sufficient to meet the needs of the commission” because eventually the responsibility would shift to individual district treasuries.⁶¹ It also specified connections to the powerful presence of the institutions of the church. Each regional sanitary team included a bishop and one medically trained person showing their powerful position in early hygiene projects. These teams ensured the streets, markets, and cemeteries of Oaxaca were clean and reported the results of the smallpox vaccination efforts. These efforts represented responses to epidemics and not secure methods to provide preventative public health care.

The measures taken to vaccinate the city and the rural regions represented an invasive and unwelcome “cleansing” of the populace. These cleansing efforts were realized in various vaccination projects throughout the state of Oaxaca. Like the state of Guanajuato, Oaxaca developed a comprehensive public hygiene program that included the continuous application of immunization, attention to hygiene and nutrition, and provision of medical care. Even in the early nineteenth century, “officials, priests, physicians, and others realized that improving hygiene and increasing resistance to disease, particularly among children and the poor, required attention to diet, hygiene, and other living conditions.”⁶² Officials in Oaxaca approached public health and hygiene as an all inclusive treatment of the body and environment and issues of hygiene gained public and governmental attention.

⁶⁰Archivo General del Poder Ejecutivo de Oaxaca (AGPEO), *Colección de Leyes y Decretos* Tomo I, 28 September, 1826. Decreto: Dispone el establecimiento de una junta Superior de Sanidad, p. 312.

⁶¹AGPEO, *Colección de Leyes y Decretos* Tomo I, 28 September, 1826. Decreto: Dispone el establecimiento de una junta Superior de Sanidad, p. 313.

⁶²Thompson, “Save the Children: Smallpox Inoculation” pp. 446-7.

In Mexico City, an 1856 decree created a Superior Council of Public Hygiene composed of five professors of medicine and surgery and two of pharmacy. The secretaries from the old Sanitary Commission shifted to serve the new council and were entrusted with various duties. The obligations of the commission included inspections of medicinal plant, *botanicas*, and hospitals to ensure that they dispensed known medicines, and form regulations for all medical practitioners. The commission was to ensure that “no medical practitioners existed in the state that lacked a legal title.”⁶³ The official requirements and plethora of documents was a result of the city’s attempts to regulate the people and control the activities within the state. Although, the vaccines were a medical procedure, officials did not specifically charge, or were able to charge, medical personnel with the vaccination duties. This could represent the realization by the law making body about the dearth of medically trained people in the state. The municipal government of each individual district named the agent of the vaccine and provided a salary, and no other requirements are specified.

A circular published by the state of Oaxaca in 1863 outlines the structure and rudimentary functions of the vaccination projects within the capital and outer-lying regions. The vaccine was to be applied to every class of person “with regularity and consistence and all measures taken according to the science of the vaccine.”⁶⁴ The regional *ayuntamiento* received the vaccine from the capital and administered it three or four times a month in the *palacio municipal* or if possible in the hospital. The time and place was advertised by a poster on the government building and the official administrator of the vaccine kept a register of the number of vaccinations, the age of the person, the effectiveness of the vaccine on the person. The

⁶³ AGPEO, *Colección de Leyes y Decretos* Tomo II in Junta de Sanidad, 16 July, 1856. Decreto Establece un Consejo superior de Salubridad Publica.

⁶⁴ AGPEO, *Colección de Leyes y Decretos*, Tomo III, 15 January, 1863. Ley Cir. #8

administrator was also instructed to “have an assistant who would visit the vaccinated person daily, to see if the pus filled abscess developed in accordance to the prescribed way according to the vaccine.”⁶⁵ The persons vaccinated would also receive a certificate, free of charge, stating their vaccinated status. The vaccination and the certificate combined marked a clean citizen, and yet we will see how these terms were resisted by the popular classes.

In 1868 Antonia Salinas, a doctor from Mexico City published another brochure meant to instruct on vaccine procedure that was distributed to all Mexican states on the care and instructions for the vaccine titled “Methods of acquiring and maintaining the Vaccine Fluid.” He wrote about the advantages and disadvantages of *brazo a brazo* and the best methods for using the crystallized vaccine fluid. He described the steps of the vaccine in a step by step fashion, and inserted his opinion of the characteristics of a good vaccine and procedure. Salinas continued to outline three distinguishable periods of a valid vaccine and the symptoms that accompany them. The first period lasted from the time of the injection until the third or fourth day in which the individual had not changed significantly save the scar from the instrument of the vaccination. Inflammation denoted the second period and he described the appearance and characteristics of the scar until about the tenth day when the patient would feel a slight fever. It was on this day that the agent of the vaccine should test the pustule and make sure that transparent pus will appear from the lesion when punctured.. The lesion should be emptied completely of liquid in order to facilitate further vaccines; he wrote “this observation is important to be secure that the pus is good.”⁶⁶ The third period designated a transformation of the area of injection and the patient would be left with a deep scar as a result of the vaccination.

⁶⁵ Ibid.

⁶⁶ AGPEO, *Colección de Leyes y Decretos, Impresos/Folletos Vacuna S.S. XIX.XX Legajo 2*, 30 March, 1868. “Ligera Noticia sobre la Vacuna”p. 2.

Salinas assured the readers of the brochure that during the course of the periods of vaccination “that almost no one will require more medical attention, perhaps just moderation in food and drinks.”⁶⁷ If the pus resulted in a larger infection of the skin, he advised various salves and cleaners including vinegar, to reduce the inflammation. These steps showed the intricacies and multi-step process of the vaccinations and how important timely and knowledgeable attention would ensure successful vaccination against disease. Salinas was a doctor from Mexico City where “modern” medicine was more common in contrast to the “only two hospitals [that] operated in the city of Oaxaca during the Porfirato.”⁶⁸

The *jefe politico* of the central district distributed a circular that spoke to some of the obstacles faced by the districts in following the advice proposed in 1863. Although the government had provided funds and although the administration of the vaccine had succeeded in the capital, the other districts faced problems. He wrote that “with respect to the districts without doctor, the practice should be put into the hands of the respective *municipios*.”⁶⁹ This signified that not only should the *municipios* take physical charge of assigning the task of agent of the vaccine to a trusted person, but they must also take on the financial burden of paying the salary of that person. The agent of the vaccine was also required to post notification about the vaccine and keep a record of those vaccinated.

By 1877 the official mayor of the central district, Francisco Ramirez, sent a reminder circular that included some examples of the correct completed form. He wrote that he hopes that the “towns of the state help their agents to comply with the vaccination requirements” as stated

⁶⁷ Ibid. p. 7.

⁶⁸ Chassen-López, *From Liberal to Revolutionary Oaxaca*, p. 420.

⁶⁹ AGPEO Colección de Leyes y Decretos, Sección 3a, Circular #3, January 15, 1875.

in the circular of the 15 of January 1863.⁷⁰ It appears that these instructions were not followed well and the state government looked to expertise outside of the government for expertise.

In 1878 the secretary of the government of Oaxaca consulted the Society for Doctors and Pharmacy saw the need to translate the need for hygiene into legislation. They presented and published five propositions for maintenance of public hygiene. Proposition #1 called for the *jefes políticos* to guard public hygiene by sending a report every six months listing specific cases of sickness within their populations, especially if one of the cases “had epidemic characteristics.”⁷¹ The municipal administrators were to empty and dry all stagnant waters that could be a possible source of infection and disease. These epidemic measures extended into houses and police forces were used to locate and destroy any source of infection.

Police forces were instructed to inspect homes when “they discover the houses are using muddy pipes, with an excessive accumulation of decomposing or rotting plant or animals materials and also accumulation of excrement or human waste that they should dispose of it far from the population.”⁷² The police and the members of the Hygiene Commission, *Comisione de Salubridad*, should visit all prisons of both sexes, hospitals, hospices, public schools, and all other establishments where there was a conglomeration of people to observe the level of cleanliness. These levels of cleanliness included: “ample ventilation, with enough windows that allowed circulation of fresh air and allows necessary sunlight.”⁷³ The powers concerning the regulation of fruits and vegetables granted special discriminatory powers to the inspection team,

⁷⁰ AGPEO, *Colección de Leyes y Decretos* Impuesto del Estado Tomo IX, July 10, 1877, p. 78.

⁷¹ *Ibid*, p. 15.

⁷² *Ibid*, p.16.

⁷³ *Ibid*, p. 16.

to protect the children; they should eliminate the products that cause them “indigestion and grave diarrhea.”⁷⁴

The fifth and final proposition hoped to guard and maintain public hygiene encourage all members of government to support the Hygiene Commission in the application of the vaccines throughout the regions of Oaxaca. In order to preserve the population against the devastation of epidemics, officials should care for the distributed vaccines as instructed and “apply and promote the vaccination in remote populations.”⁷⁵ All of these measures were promoted in Oaxaca to designed ensure the populations hygiene and protection against epidemics.

In 1879 López Garrido, secretary for the capital city political boss, published a circular that demanded a report of the vaccine project from each *jefe politico*. The circular required the monthly production of a “notice which details the number of children vaccinated of both sexes” for data collection and to carry out efficiently the orders of the vaccinations.⁷⁶ He wrote that these efforts to effectively use and record the vaccinations will help guard the cities and state against the horrible threat of epidemics.

A warning circular informed the political officers and about the smallpox epidemic in the United States that occurred in 1882, and made moral statements about the importance of vaccinations, even in the face of a lack of personnel. Written by the mayor of Oaxaca de Juárez, Francisco Pérez, it expressed fears that the same terrible casualties would be caused by an invasion of black smallpox and that the prevention responsibilities rest upon the town councils. In order to prevent such an epidemic, as they had experienced in the past, and to protect “the

⁷⁴ Ibid, p. 17.

⁷⁵ Ibid, p. 17.

⁷⁶ AGPEO, *Colección de Leyes y Decretos*, Tomo X, 23 May, 1879. Cir. #15.

development of the common good”⁷⁷ the vaccine must be properly employed in all localities.

The choice of words entailed a certain moral obligation to use the vaccine in addition to the order handed from the political head in Oaxaca to the town councils across the state. The moral intimidation was also accompanied by a small threat of state intervention. If one case of smallpox was discovered in any of the local districts they must immediately report such a blunder to the capital and the superior capital government council would step in to make sure that the “best practices” were applied to the situation.⁷⁸ These statements exemplify the pushes and nudges for control and power between the *jefs politicos* and the state government.

Politicians and other elites sought direct exchange between their legislation and the general populace, seeking to eliminate organizations and solidarities. Smallpox vaccination was declared obligatory by 1899 but the reporting and actual vaccination numbers were questionable in that many reports “had actually fabricated the statistics rather than vaccinate a reluctant population.”⁷⁹ It was not until 1903 when Governor Emilio Pimental provided a small compensation for agents carrying out the vaccination, that reporting of vaccination numbers became more reliable. Pimental formed a vaccine corps which divided the state of Oaxaca into zones managed by a specific agent propagating the smallpox vaccine. The vaccination projects of Oaxaca were a state directed project as the elites but their commands were not absolute as we shall see later in the negotiations made by local authorities about the circumstances surrounding the vaccine project. However, elites continued to dictate the terms and conditions of hygiene publicly to the citizens of Mexico.

⁷⁷ AGPEO, *Colección de Leyes y Decretos*, 14 March, 1882. Cir. #9.

⁷⁸ *Ibid.* Cir. #9.

⁷⁹ Chassen-Lopez, *Liberal to Revolutionary Oaxaca*, p. 376.

The National Congress of Hygiene formed on September 16, 1883 in Mexico City with the purpose of gathering and studying the “information about the diverse types of sicknesses in order to supply the right tools and facts to obtain a satisfactory result.”⁸⁰ The commission was formed to discover and disseminate information about vaccinations against smallpox, and how to improve the results. The commission requested the following information: the number of persons vaccinated in the past three years, the origins of the vaccine and the results obtained the number of people who died from smallpox, and the number of people who survived an attack of smallpox.

The Hygiene Commission compiled the information in a concise format, to be sent to the Secretary of the respective district. The commission continued to state that although smallpox has become endemic in major areas of the Republic, the vital interest and contributions to the study of the vaccine “are necessary to improve and learn about the effectiveness of the vaccine in Mexico.”⁸¹ The primary aim of the commission was to collect data, but they presented the information from a moral high ground that “established a political-administrative organization structured to favor and safeguard the interests of the dominant classes.”⁸²

However, general apathy surrounded the vaccine, and Oaxaca fell behind in reporting its findings to the hygiene commission in Mexico City. The communication lines between the capital and the other districts of Oaxaca were inconsistent, especially concerning the results of the vaccine. This is evident in a circular published by the general secretary of the state in 1893. In listing the grievances about the vaccine project he writes that he has never tired in his charge of combating the epidemic and has spent considerable monies on the project. In order to

⁸⁰Spanish, (Mexico) AGPEO, *Colección de Leyes y Decretos*, 27 September, 1883. Cir. #33.

⁸¹ Ibid.

⁸² Marquez, Joly, “Ministries of Public Health” p. 380.

vaccinate all the Oaxaqueño population, the governor had “distributed funds from the public treasury, but it had not overcome the apathy of those entrusted with the vaccine, nor dissuaded some from pronouncing that the vaccine would make a person sterile.”⁸³ The circular expressed frustration with the indifference agents in charge of implementing and the suspicious notion that the operation would result in sterilization. These complaints articulate the perceptions of elites of the methods of negotiation of the popular classes. Elites presented a “shot” of “modernity” and the populace reacted with noncompliance and ignorance. This circular highlights the exchange between state legislation and popular reaction and it is at exactly that plane of contestation and negotiation where the analysis of vaccinations showed a clash of ideas and actions.

The governor blames the agents of the vaccine for not informing the government of the number of children vaccinated or whether the fragile vaccine has been properly conserved. The government needed this information in order to return the unused vaccine utensils and determine the towns that have not been visited. The districts that had received the vaccination utensils had not written to the capital about the status of their operation, they had not asked for more vaccine, nor had they been clear about any of the supplies needed to carry out the project. For that reason, the forceful circular demanded the following:

“First, that in no more than fifteen days, the propagators of the vaccine should be named and the *jefe políticos* will create the notice about the status of the vaccine in their district, the results, what supplies they lacks and why, the difficulties they faced in verifying the effectiveness of the vaccine, and the extra help used to fulfill the vaccine goals.

Second, an equal notice should be composed by the same propagators monthly stating the numbers vaccinated and verifying that the number vaccinated in the month before were effectively immunized.

⁸³ AGPEO, *Colección de Leyes y Decretos*, 22, February, 1893. Cir. #8.

Third, the *Jefe Politicos* are required to follow the exact steps to complete these smallpox preventative measures, and documenting the results to be expediently reported to the Superior Government of Oaxaca City.”⁸⁴

Despite the forceful and demanding nature of the February circular, in June of the same year, it was re-circulated. It was published with an additional paragraph stating that no notices had been received by the government, and that the *jefes politicos* of all districts pay close attention to the prevention of disease “and that all steps of the previous circular be completed and the capital government given notice.”⁸⁵ The repetitive nature of these demands itemized in circulars from 1820’s until the Mexican Revolution of 1910 shows the reluctance of the general populace to submit to elitist demands. The vaccine projects represented a hygienic effort to clean the largely rural and indigenous population of Oaxaca.

Vaccination Reports: Verifications of “Modernity”

A major part in studying the implementation and documentation of these vaccinations begins with the most frequently cited piece of legislation concerning the vaccinations, the *fracción XXIII del artículo 19 de la Ley de 24 de Noviembre, 1889*. The law was published as a *Ley Reglamentaria* or Regulatory Law in Oaxaca de Juárez on July 28, 1899. Ten years passed between the formulation of the law and its circulation and its implementation.⁸⁶ The law begins by stating that vaccination is mandatory for all the inhabitants of the state.⁸⁷ Article #2 states that the vaccination “will be administered for free, and the political authorities and municipalities have the obligation to conserve and disseminate it in such a way that no known inhabitants are

⁸⁴ Ibid, #8.

⁸⁵ Ibid. # 32.

⁸⁶ The cause of the lengthy legislative delay requires more research to determine.

⁸⁷ AGPEO, *Colección de Leyes y Decretos*, Tomo XXII-4, July 28, 1899. Artículo #1.

neglected.”⁸⁸ To that end, all district municipal authorities of the state are required to draw up a budget proposal which details expenditures and the funds which they can “use to attend to such an urgent necessity.”⁸⁹ Article #3 appears to be an unfunded mandate from the state government where the state requires that all people are to be vaccinated, and yet does not guarantee the funds, but asks that they see what funds the municipalities are able to sacrifice from their coffers. Therefore, the law had the ability to state that vaccinations will be granted completely free of charge to the populace, while the project required funds from municipal authorities that also drew funds from their inhabitants.

Article #4 underscored the negotiation between elite visions of modern hygiene and actual resources; it examines the lack of professionalized hygiene care provided to many Mexico communities during the Porfiriato. It read: “In the municipal district government centers where there are doctors, they, or in their absence, the civil state judges, teachers, secretaries of the municipal buildings, or any practical and learned person, are charged to conserve and administer the vaccine.”⁹⁰ Article #3 illustrated the indiscriminate process of doling out the responsibility for the vaccine. It mentioned no training required to conduct a vaccination which was a relatively advanced medical procedure for the time period. The irregular process of naming the propagator of the vaccine could very well have contributed to largely perceptions of the people of rural Mexican districts of the purpose of the vaccine. It also showed the haphazard nature of the intrusion into the bodies and spaces of the people of Oaxaca.

Article #6 continued to dictate the procedure of the vaccine and the described actions required of the vaccine agents. It stated:

⁸⁸ Ibid. Artículo #2.

⁸⁹ Ibid. Artículo #3.

⁹⁰ AGPEO, *Colección de Leyes y Decretos*, Tomo XXII-4, July 28, 1899. Artículo #4.

“The employees in charge of the application of the vaccine must act in accordance with the local authorities, the days and hours when they should perform the vaccinations. Favoring Sundays over all other days, all announcements for vaccinations should be put upon the most public places, the police station, and the Commissioners.”⁹¹

This article shows not only the logistical coordination necessary between the propagator and the local authorities but also between the authorities and the public. The notice for the vaccine was to be placed in a prominent and well trafficked place. The authorities needed to inform all inhabitants of the required vaccine or else they were subject to fines.”⁹² Article #9 demanded that a paper record of their vaccination should be “given without cost...if the vaccination was successful or if not to vaccinate as many times as possible until completed successfully.”⁹³ These reports served as the basis for all medical records in Mexico and were an important precedent for public hygiene throughout the country. Article #10 stated that, these papers failing to prove such vaccinations, the scar that is left from the injection will prove an individuals compliance with the law.

The law also assigned responsibility for compliance to a wide range of people, enforcing the vaccination law requirements upon the “parents of the families, the teachers, political officers, and all those in charge of a collective number of people.”⁹⁴ Each *jefe politico* was to inform the state of their districts compliance and for those outside of compliance, the necessary fines. In the law, three articles (articles # 11, 13, 16) made reference to the need to vaccinate all children, and in articles #14 a fine of “five pesos” was a consequence if no report was made of an un-vaccinated child.⁹⁵ The civil registration Judges of Oaxaca were charged with the responsibility to inform all parents, after birth registration, of the requirement that they present

⁹¹ Ibid. Article #6.

⁹² Ibid. Artículo #6.

⁹³ Ibid. Artículo #9.

⁹⁴ Ibid. Artículo #11.

⁹⁵ Ibid. Artículo # 14.

their child for vaccination inside of three months, or within the “first month if there appears any sign of an epidemic in any towns of the state.”⁹⁶ All the information concerning the vaccines was recorded in a book that supposedly delivered to each district, entitled “Book of the Vaccine”. The propagator was in charge of completing those forms and mailing the information to the state government.

Unlike today, being vaccinated did not consist of a simple one time visit. First, one had present one’s self to get the first injection, and following that the pus filled inflammation should form on the arm. This did not conclude the vaccination, the patient was required to “present one’s self at the office where you were vaccinated the 7th day following the day of your injection to repeat it if it was not successful, or in order to recover and guard the pus liquid for the further propagation.”⁹⁷ For this process to be successful, the vaccination projects required a completely willing populace and competent propagators, both of which were in short supply during this time period. It also required clear communication of the aims and goals of the vaccines to the public, which was not the case. The lack of communication was only one factor that contributed and facilitated the negotiation of elite crafted hygiene objectives with the needs, beliefs, and initiatives of the ordinary citizens.

Negotiations of “Modernity”: Agency of the people of Oaxaca

The negotiation of the vaccination projects was evident in the letters between *jefe politicos* and state authorities. The letters allow space to infer and evaluate resistance, opposition, and negotiation of the funding and staffing required for the vaccinations. The words of resistance, opposition, and negotiation refer to the challenges by *jefe politicos* and agents of the vaccines that “stop well short of collective outright defiance. Here the discourse is based in

⁹⁶ Ibid. Artículo # 13.

⁹⁷ Ibid. Artículo #15.

the ordinary weapons of relatively powerless groups: foot dragging, dissimulation, false compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so forth."⁹⁸ Examples of these negotiations were demonstrated within the exchange of information between the state government of Oaxaca and the *jefe politicos* of individual districts. These negotiations were less confrontational forms of resistance but exhibit the agency and will of the people pushed into the voiceless category by elite visions of “modernity”. These acts of negotiation did not make the headlines of newspapers in Oaxaca but represented a very real and potent voice in the vaccination project.

A nuanced view of the political structure of Porfirian Oaxaca is necessary to understand the following arguments. Political power after Mexican independence rested mainly in the hands of the state government. In his analysis of the village of Villa Alta, Peter Guardino shows that village configurations of government “maintained a high degree of autonomy even as they continued to provide important fiscal resources to the government.”⁹⁹ The ties between *jefes politicos* and state officials were tenuous, and official regulations and decrees were often dependant on local interpretation. However, as we will see in the examination of the vaccination projects, the source of funds for implementation was often a point of contention. These disagreements over funding of state implemented projects point to the agency of local governments and to their local adaptation of elite tools of modernity.

Visions vs. Reality: Obstacles facing the Vaccination Project

⁹⁸ James C. Scott. *Weapons of the Weak: Everyday forms of Peasant Resistance*. Yale University Press: New Haven, 1985. P. 29.

The actual vaccination project in all regions of Oaxaca faced many difficulties. These included lack of funds, lack of trained personnel, vaccination procedure miscommunications and the general indifference toward immunizations in Mexican communities.

The very nature of the vaccine necessitated clear and open lines of communication between hygiene officials in the city and countryside. The vaccine could quickly expire and to be effective the smallpox vaccination projects required a larger level of public hygiene organization than had previously existed in Oaxaca. For the inoculations to be effective the “techniques had to be applied in a systematic, sustained way” and this proved to be another barrier between the richer citizens and the poor.¹⁰⁰ All vaccine circulars were accompanied by the vaccination project package, a package that required precise handling procedures to maintain the integrity of the vaccine. The parcel contained two *lancetas* (an instrument made from steel with a sharp tip used to open pustules) and two tubes of vacunal lymph (the clear liquid containing the cowpox vaccine). The package along with the previously described information packets, were the only tools available to the rural propagators. From a historical standpoint these meager tools were not enough to neither learn and understand the purpose of the procedure nor ensure proper vaccination practice. Despite the intentions of legislators impose medical disease prevention procedures, the reception in the small towns of Oaxaca was general apathy and disregard.

Another issue that muddled lines of communication and understanding of the effectiveness of the vaccines was time. The time needed to discover whether the vaccine had properly immunized the patient was about fifteen days. During this time the person might be called to any number of tasks and not report back to the *ayuntamiento*. The vaccination project

¹⁰⁰ Thompson, “Save the Children: Smallpox Inoculation” p. 432.

faced many obstacles, lack of funds, lack of qualified agents of the vaccine, and lack of clear communication. Considering these difficulties, any number of variables would interfere with the vaccination data.

In both the capital and the rural regions, the vaccination projects met with popular resistance. The lack of medical personnel and proper equipment to apply the vaccine contributed to suspicions about the projects. In a similar case study of Guanajuato Angela Thompson explained that the state “often did not have properly trained personnel and money to pay for inoculations and treatment for the sick.”¹⁰¹ These restraints showed the disparity between the visions of the elite and the scarce set of resources actually available. The success of the vaccinations depended on the social situation of Oaxaca and Guanajuato as these “immunization programs were imposed from the top downwards on a population that was often suspicious of officials and their motives.”¹⁰² Sterilization and fear of contracting smallpox were just some of the concerns for the people of Oaxaca in vaccination projects that required physical intrusion or injections in the bodies of citizens.

As mentioned earlier, the execution of the vaccination met many obstacles, and was poorly applied because of resistance of the populace and ill-trained agents. The vaccination projects enacted during the Porfiriato in Oaxaca intended to “sanitize” the people and served as a mechanism for social control. They often advocated the intrusion into Oaxacans’ private space, and disregarded widespread fears about the substandard implementation of vaccines. The vaccination projects and the bureaucracy that enforced it faced many issues. These included lack of funds, lack of trained medical professionals, and miscommunications about vaccination implementation. This vaccine legislation was formulated by elites to inspect and “cleanse” the

¹⁰¹ Ibid. p. 441.

¹⁰² Ibid. p. 454.

populace. Despite elite efforts to regulate them, the average participating Oaxacan was able to influence the effectiveness and rules accompanying the vaccines. Public hygiene measures were influenced by the political and rural culture of the time, and resulted in a largely ineffectual project, although it served some purposes, such as strengthening a budding bureaucracy, increasing municipal communication, and providing vaccinations against an epidemic. The dual purpose of epidemic prevention and class control promulgated in the smallpox vaccine projects show legislative efforts to “modernize” Oaxaca. These efforts were influenced by the social and political culture of the Porfirato and show the disparate applications of public hygiene measures.

The following evidence demonstrates that the lines of communication between the governmental officials and vaccine agents, and the public whom they hoped to vaccinate were not clear. The announcements for the vaccinations appear confusing and were contingent on a literate populace and the placement of the announcement in high traffic areas of the community.

The public notice from the district of Ocotlan de Morelos reads as follows:

“Public Notice

Make it known to all of the inhabitants of the district that the vaccine will be administered for free by the Director and the assistant of the Hospital of this District, the days of the 20, 25, and 30 of this month; 5, 10, 20, 25, and 30 of December in the Municipal Office of this town, from 10 to 12 a.m.

In strict accordance with the strict observation of the Regulatory Law of November 27, 1889.

Ocotlán, November 17, 1900

El Jefe Político

Ernesto L. Roberto”¹⁰³

If this public notice served as an example of the type of publicity for the vaccine promulgated in all districts of Oaxaca, there are several reasons why the vaccine was ill received. The notice did not state the purpose of the vaccine, and no danger of epidemic disease is mentioned. It also provided little in the way of explaining the preventative qualities of the vaccine, or for that matter, that it protects against smallpox specifically. No hygienic rationale is

¹⁰³AGPEO, *Secretaria del Gobierno del Estado de Oaxaca*, “Aviso Publico” in Ocotlán November, 17 1900.

provided for the Oaxacan citizen to become vaccinated, which might be understood in relation to state-wide hygiene efforts. The notice only stated that vaccinations were required according to the law of 1889. The notice also required a literate and numerate audience, unless, as explore before, the announcement was read aloud in the streets of the districts. The public notice was also written by hand and although my copy is legible, it could very well appear illegible to anyone unaccustomed to handwritten notices.

The availability of the vaccine for free does a good deal to promote the procedure. Also, the district of Ocotlán had the good fortune to employ a doctor and a hospital employee for the vaccination procedure, in contrast to many districts who relied upon non-medical persons. The notice bears the official seal of the district which also lends credibility of the announcement and the vaccinations in general.

Case Studies: Individual District experiences of Vaccine Project, 1900

The following case studies examine the how environment and attitude surrounding the vaccination projects affected certain districts in particular. The correspondence between the state government and the *jefe politicos* show the organizational strategies, the qualifications of personnel involved, and the economic issues that plagued the vaccination project. Public officials showed agency by responding to state dictated demands with reluctance and unaccommodation. Methods of agency employed by the agents of the vaccine included everyday “weapons of the weak” like “foot-dragging and gossip.”¹⁰⁴ The use of some specific cases will illuminate the exchange between local, state, and national authorities concerning the propagation of the vaccine. The most frequent and rich documents concerning the vaccinations in Oaxaca are from 1900 due to the *Ley Reglamentaria fracción XXIII del artículo 19 de la Ley de 24 de*

¹⁰⁴ Scott, *Weapons of the Weak*, p. 29.

Noviembre, 1889, published in 1899 which demanded a written response. Each case study analyzes correspondence from different districts in the same year to scrutinize the obstacles of the vaccine project within a distinct time frame.

Choapam in 1900

Ramón Santaella was the *jefe politico* for the district of Choapam in 1900. He communicated by letter to the state secretary Miguel León with questions and concerns about vaccination project procedures. Francisco Morales also recorded problems as the agent in charge of the vaccines and his eventual renunciation of the vaccination duties ultimately show the agency of ordinary Oaxaqueños to influence and negotiate “modernity” projects. The examination of Choapam represented a typical set of correspondence and therefore the first case study deserves a lengthy examination. The in-depth examination of the letters between local and state illuminated the small nudges for power in Choapam and are presented here as a model of the similar dialogues about vaccinations other districts in Oaxaca.

In February of 1900, the *jefe politico* of the district of Choapam, a small town outside of Oaxaca City wrote to the government secretary in charge of the project, responding to the text of the *fracción XXIII del artículo 19 de la Ley de 24 de Noviembre, 1889* which was made law, published, and circulated July 28, 1899. The law called for the documented vaccination of all the people of Oaxaca by a designated agent. Francisco Morales was recruited from the nearby district of Villa Alta to carry out the vaccination project for the district of Choapam. Morales wrote that “in almost all of the towns, there are not any persons that can be put in charge that meet the standards stated in articles, #4, #17, #18, or #19.”¹⁰⁵ Morales stated that no person meets the requirements of article #4 which maintained “civil judges, teachers, secretaries of the

¹⁰⁵ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Francisco Morales (Villa Alta) to Jefe Político Ramón Santaella, February, 23 1900.

ayuntamientos or people who practice or are learned [...] are to be in charge of conserving and administrating the vaccine.”¹⁰⁶ Morales contended that not a single person could be established to carry out the vaccinations in the district of Choapam or in Villa Alta.

Article #17 of the law stated that all the *Ayuntamientos* carry the book named “*Libro de la Vacuna*” (vaccination book) that contained the forms necessary to record the information on numbers vaccinated in each district. With the birthdates of the people in hand the agent had to make sure the populace knew the punishment for noncompliance with the law, and then ensure that “school teachers supply the vaccine weekly, noting the statistics of unvaccinated persons.”¹⁰⁷

Article #18 also required that the statistics (sex, age, address) of those vaccinated and unvaccinated be submitted to the *jefe politico*, who would then summarize the numbers and forward them to the state government secretary. Morales wrote that none of these conditions could be met by either district, but that the two districts must pull their resources together in order to fulfill the letter of the law. These demands hoped to classify and label the people of Choapam according to the aforementioned statistics. Morales is able to negotiate these demands by pointing to the lack of medical or “educated” people willing to take on the duties of the vaccinator.

Morales solicited that the state government secretaries bestow him the job of the agent in charge of the vaccine.¹⁰⁸ He would collect a salary from local and state government, in accordance with Article #3 which stated that the government would “share part of the monetary

¹⁰⁶ AGPEO, *Colección de Leyes y Decretos*, Tomo XXII-4, 27 November, 1889. circulated by Miguel Bolaños Cacho, secretario. 28 July, 1899. Artículo #4.

¹⁰⁷ AGPEO, *Colección de Leyes y Decretos*, Tomo XXII-4, 27 November, 1889. circulated by Miguel Bolaños Cacho, secretario. 28 July, 1899. Artículo #17.

¹⁰⁸ AGPEO, *Secretaría del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Francisco Morales (Villa Alta) to Jefe Político Ramón Santaella, February, 23 1900.

expenditures” in order to implement the urgent and necessary vaccinations.¹⁰⁹ He requested *Cuatrocientos veinte pesos al ano*, 420 pesos per year in salary. His next suggestion reflected the confusion over funding of the vaccination project. Morales wrote “As it is known that the *jefe politico* of this district are not really authorized to grant this salary for this class of employment, I suggest to you Sir, that you forward my solicitation to the superior government of the state.”¹¹⁰ The discussion of the source and amount of funds necessary for vaccinations in Choapam shows the financial strain and lack of confidence in the continued support from the state government for vaccinations in the future.

The *jefe politico*, Ramon Santaella continued to write his addendum of February 28, 1900 that “it is certain that in the majority of the towns of this district there are not educated personnel to whom the law refers, and in consideration of the large distance between one town to another, it is not possible that the vaccinator could be one of the small number of teachers, who would have to abandon their instruction and take on the task of the vaccinations.”¹¹¹ Again we can see the lack of personnel was cited as an obstruction to the vaccinations. He continued to state that naming one agent, (Francisco Morales) for the propagation for all the towns of Choapam was the most convenient solution. He also emphasized the proposal that the named propagator of the vaccine does not belong to the official staff under the *jefe politico* therefore his salary should, with all dues respect, not come from the *municipios* of the district, and instead should be solicited from the superior state government.

¹⁰⁹ AGPEO, *Colección de Leyes y Decretos*, Tomo XXII-4, 27 November, 1889. circulated by Miguel Bolanos Cacho, secretario. 28 July, 1899. Artículo # 3.

¹¹⁰ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Francisco Morales (Villa Alta) to Jefe Politico Ramón Santaella, February, 23 1900.

¹¹¹ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Jefe Politico Ramón Santaella to El Secretario del Gobierno del Oaxaca, February 28,1900.

Miguel León, who represented the state government, and referred to the points outlined in the letter received written on February 23.¹¹² He approved the naming of the propagator of the vaccination in that district. However, León stated that it appeared to him that the salary of the named employee should come from the town in which the vaccination is applied. The “monthly quantity the town contributes is used to begin the vaccinations.”¹¹³ León represented the state authority and he clearly saddled the local authorities with the financial burden as well as the bureaucratic duties of seeking and confirming the agent of the vaccine.

Jefe politico Ramón Santaella wrote another memo outlining requirements to fill the solicitations from Francisco Morales. It also attempted to clarify some of the requirements for the district. First, he hoped to detail the duties expected of the propagator of the vaccine, who he described as “in charge of verifying the vaccinations, and carry the vaccine and all the vaccine tools to every town that is to receive the application of the vaccine.”¹¹⁴ His municipal office would then be responsible for report the number, age, and sex of those vaccinated. Once again the state government utilized “biopower”¹¹⁵ and demanded the use of labels and categories for the people of Choapam. There was urgency to this note in its repetitiveness, which again asked for the state government to respond to the solicitation of employment for Francisco Morales. Morales had stopped his work as the director of the Villa Alta School in order to perform the vaccination duties in accordance to the law. Santaella continued to state that the town governments would also pay part of the yearly salary for the propagator and lowered the requested amount from the state treasury, to 293.56 pesos per year.

¹¹² AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Miguel León to Ramón Santaella, March 22, 1900.

¹¹³ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from El Secretario del Gobierno del Oaxaca, Miguel León to Jefe Politico Ramón Santaella, March 22, 1900.

¹¹⁴ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Jefe Politico Ramón Santaella to El Secretario del Gobierno del Oaxaca, March 31, 1900.

¹¹⁵ Foucault, *History of Sexuality*, pp. 143-44.

The confirmation of the agent of the vaccine and salary showed the bureaucratic hoops required by the budding state powers but also the ability of Santaella to state the importance of the time of a teacher in the face of the state showed his agency. In April correspondence from Santaella to the State Secretary confirmed the naming of the vaccinator and stated Santaella will be requesting \$24.00 pesos for the monthly salary. He then proceeded to document the confirmation process he completed with Morales. Santaella interviewed Morales and closed the interview with an official oath which made Morales an employee of the Government. The full translated text follows with analysis of the context of such an oath.

“Pledge without reservation to complete and enforce the General Constitution of the Republic of the State and all the laws contained therein. Complete well and patriotically with respect to all duties of the Vaccinator in each district in accordance with the Law of the 28 of July, 1899 and the orders of the *Jefe Políticos* of the District over the matter.”¹¹⁶ Santaella wrote all of this to the State Government in order to make it legal and binding.

The official oath and the word patriotic within the oath, places the vaccination projects and the actions of the propagator of the vaccine directly under the responsibility of the government. The vaccinator was considered as an employee of the state, his salary came from the state, and all of his reporting responsibilities were to the state. Morales was previously a civilian in charge of a school in Villa Alta, but by taking the oath he was transformed into a state representative and an agent of “modernity”. It showed the efforts to centralize the power of the state and eventually federal jurisdiction over small towns in Oaxaca. It also shows a shift in responsibilities, or a shift in power. Whereas in earlier statements about vaccinations and their agents, men of the church were often included in the list of possible vaccinators, and all social

¹¹⁶ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Jefe Politico Ramón Santaella to El Secretario del Gobierno del Oaxaca, April 21, 1900.

welfare was looked after by the institutions of the Catholic Church, now the government shifted to a secular method of hygiene. This change points to a transfer of power within the “modernized” Oaxaca.

In July 1900 Francisco Morales wrote to the *jefe politico*, stating he received the salary owed to him as the propagator of the vaccine, and in August he again wrote to verify his received of \$24.00 pesos for his work. He does not include any feedback and his letter is short, formal, and to the point. Another letter indicated the opinion of Francisco Morales’s when he wrote on October 22, 1900. He stated “very respectfully” that “for reasons of my significant failing of health due to the large amount of rain during my employment as propagator in addition to caring for my family who reside out of the jurisdiction”¹¹⁷ Morales asked for permission to renounce his work as the vaccination agent. He was grateful for the confidence placed upon him by the authorities, and he stated that once his health is better, he would offer his services as vaccination again once again.

The letter sheds light on the hardships faced by the vaccination agents and suggests that little other than monetary support was provided by government authorities. Morales was able to position himself as a casualty of the job of a vaccination agent when he wrote that his ailments were a result of conditions of his work as a government employee. His failure to carry out “patriotically” his duties illustrates the frailty of the “modernization” projects. Morales lacked medical training to perform vaccinations and the amount of travel necessary to visit each district of Choapam took him away from his family. Morales appeal does not speak to the inefficiencies but he insinuates such claims. The inept planning for the vaccine project stranded agents such as Morales but his rejection of duties was a personal matter. The analysis of this exchange of

¹¹⁷ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #7, 1900. Letter from Francisco Morales (Villa Alta) to Jefe Politico Ramón Santaella, October 22, 1900.

information from Choapam to the central government in Oaxaca shows another side of the vaccination project in rural Oaxaca, and its affect on the agents.

Teotitlán in 1900

Francisco Urabien¹¹⁸ was the *jefe politico* for the district of Teotitlán and his letters to the state secretaries Francisco Belmar and Miguel Bolaños Cacho underscored personnel and funding problems. The correspondence also showed the flexibility required of one of the few medical doctors, Dr. José P. Alacá in the district who was asked to perform duties extraneous to the vaccinations.

In the May of 1900 *jefe politico* Teotitlán of Francisco (Franco in many letters) Urabien wrote to the state secretary Belmar. He responded to the *fracción XXIII del artículo 19 de la Ley de 24 de Noviembre, 1889* which was made law, published, and circulated July 28, 1899. As discussed before, the requested response from local districts was to Articles #3 and #5 concerned the budget and named the chief vaccinator. The response from Teotitlán outlined the spending expected, 79.78 pesos per month, and named Dr. José P. Alacá vaccinator accompanied by an assistant, José Muñoz Guerra. Urabien breaks down the expenditures:

| | |
|--|------------------------|
| “One doctor propagator of the vaccine in the District with a monthly salary: | \$50.00 |
| An assistant: | \$25.00 |
| For the conservation of the pus and other costs: | \$4.78” ¹¹⁹ |

From the start it appeared Teotitlán would to be able to complete more efficient vaccinations due the medical doctor and their spending sheet. Their budget sheet was clear and precise and they were able to employ and pay a practicing doctor for the vaccinations. Francisco Belmar responded that the position of propagator will be awarded to Alacá. In addition to these

¹¹⁸ The name in all correspondence is almost illegible.

¹¹⁹ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #4, 1900. Letter from Jefe Politicos of Teotitlán, Francisco Urabien to Francisco Belmar, May 16, 1900.

requirements, Belmar inquired whether it is possible for the Dr. Alacá “practice the autopsies for the district as well”¹²⁰ Urabien responded that he will make Alacá aware of all his duties as propagator of the vaccine, and attempted to clarify the conduct concerning the autopsies in Teotitlán. He inquired, that in the cases where the autopsies were required for the resolution of a judicial matter, the people of Teotitlán were not to be charged a partial fee for the service, but “in cases of disinterment with an autopsy that are a greater burden and represent a hygiene danger, in some cases a risk of your life, I promise they will be performed at the conventional and reasonable price.”¹²¹ The letter continued to discuss the reasonable nature of the cost of health care and praised the commitment of Dr. Alacá and ends his letter saying he should inform the Secretary that Alacá “lends his services totally free of charge and at all hours for the examination and treatment of the sick and that he bestowed upon the poor people of the district his professionals services and medical administrations for the motives of the vaccination completion.”¹²² By June 6, Belmar sent his approval. Urabien replied three days later, that Dr. Alacá will serve as the vaccinator in the district, “administering it in their *municipio* and setting out with the same project for all the towns of the district...as well the other services mentioned in the official letter of 29 of May.” The constant reference to the abilities of Dr. Alacá to perform autopsies and any other services required of a Doctor in small, poor, hospital-less towns shows the deficiencies in medical services and the bureaucratic scramble to arrange such services.

Miguel Bolaños Cacho wrote to Urabien and Alacá August 3, 1900. In the letters he made clear that the doctor was expected to perform the duties of autopsies when required of him

¹²⁰ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #4, 1900. Letter from Francisco Belmar to Jefe Políticos of Teotitlán, Francisco Urabien, May 23, 1900.

¹²¹ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #4, 1900. Letter from Jefe Políticos of Teotitlán, Francisco Urabien to Francisco Belmar, May 29, 1900.

¹²² *Ibid.*

and carry out the duties of the vaccinations of the District of Teotitlán. He established the monthly salary which “the district will pay from the municipal funds.”¹²³ Again, the municipalities were required to pay for the vaccination expenses, which the State and Federal Authorities had devised. Urabien mentioned the oath that was also used in Choapam. Dr. Alacá was also asked to sign in order to make his employment official in the eyes of the State. He sent two copies to the Secretary in Oaxaca, one for *jefe politico* and one for the vaccinator. The terminology of “state employee” shows the shift of duties and the designation of an agent of the “modernity project”. The once normal citizen and practicing doctor was transformed by this oath into an agent of the state. His services were changed to state sanctioned actions, literally an agent “injecting modernity” into the people of Oaxaca.

Miahualtán 1900

Fuénirry¹²⁴ Garcia, *jefe politico* of Miahualtán, exchanged letters similar to those of local authorizes in Choapam and Teotitlán. He wrote to the state secretary Francisco Belmar about the importance of the salary and official “state servant” status for the vaccinator Miguel Manleón. This letter notified the state authorities of the lack of staff available for vaccinations and exhibits the struggle to find a willing and suitable candidate for the top-down project of vaccinations.

Fuénirry wrote on January 8, 1900 to the state secretary and the text of the letter was similar to other letters written from various districts in reaction to the demands of the law. Fuénirry requested the sum of 531.99 pesos for the vaccinator in his district. He included another sheet with a detailed list of all the towns in his district and the cost for the vaccination. However, he asked that the superior government “if possible, to please serve us with a

¹²³ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Expediente #4, 1900. Letter from Miguel Bolaños Cacho to Jefe Políticos of Teotitlán, Francisco Urabien.

¹²⁴ The name in this document is almost illegible.

designated person with whom we can put in charge of the vaccinations in this district.”¹²⁵

According to the letter of the law, there existed no doctors, no judges, no teachers, and no “educated” people in Miahualtán free to implement the vaccine. There are multiple interpretations for this request, it is possible that no member of the community wanted to volunteer for the low status position of propagator of the vaccine, or perhaps the superior government stipulations were too demanding to meet and the district shifted the responsibility back towards the state government.

The General Secretary, F. Belmar responded on February 14 naming Miguel Manleón propagator of the vaccine with a monthly salary of \$25.00 pesos. The formal letter to Manleón confirmed his salary and informs him he will be paid from the District funds recovered for the purpose of the vaccine service. He continued to write about the “officializing” nature of the project, that “you will be equipped with the correct papers and stamps to complete your dispatch.”¹²⁶ The official titles, stamps, and papers were a part of the tackle of a bureaucracy funneled into an agent of the vaccine.

Jefe politico of Miahualtán García wrote on February 19 to confirm the vaccinator then wrote again on March 29 concerning the vaccine services in his district. He returned the information required concerning the pledge taken by the vaccinator and he stated that Manleón “hasn’t presented himself until today...and has already completed the vaccine in many immediate pueblos.”¹²⁷ Did García see himself in remission of duty by his failure to perform the oath before any vaccinations, or did he accept such logistical irregularities as normal when dealing

¹²⁵ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*, Expediente 5, Section 1A, Letter from Miahuatlan to Superior Government, 8 January, 1900.

¹²⁶ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*, Expediente 5, Section 1A, Letter from Secretary General, F. Belmar to Miguel Manleón, February 14, 1900

¹²⁷ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*, Expediente 5, Section 1A, Letter from Miahuatlan to Superior Government, March 29, 1900.

with people affiliated with the state government? In the same letter, he writes that he hopes to return the “many more *crisales* (vials) to collect the pus for vaccinations.”¹²⁸ García hoped to tie up the loose ends left by the vaccination application in his district. The following letter exemplified the difficulties of the vaccination project in Miahuatlán.

The following communication between the superior government and the *jefe politico* of Miahuatlán named a different propagator of the vaccine, assigning C. Alberto Cabrera along with the same salary, communicated on May 3, 1900. A similar notice was sent to Norberto on the same date, in the expectation of dispatching him to the district as soon as possible. In each note Belmar, the state secretary, made it known that the salary should be paid by the district in question and requested confirmation of such from Cabrera and García.

Cabrera responded on May 8 and accepted his position as propagator of the vaccine in the district of Miahuatlán. Although he acknowledged the position thankfully, he wrote “In order to reach my destination I need some recourse to lessen the necessary expenditures of my voyages.”¹²⁹ Belmar responded to this request May 9 and re-stated the established system of payment for all propagators of the vaccine from the municipal funds. He clearly established that “there is no room for considerations of anticipated payment according to what you have asked.”¹³⁰ This exchange demonstrated the financial burden placed upon not only the district treasury, but the propagators themselves. Cabrera was required to travel extensively and was provided with no funds to begin his travels. The denial of funds to facilitate vaccinations reflects not only a constrained treasury but

¹²⁸ Ibid.

¹²⁹ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*, Expediente #6, Section 1A. Letter from Alberto Cabrero to the State Government. May 8, 1900.

¹³⁰ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*, Expediente #6, Section 1A. Letter from General Secretary F. Belmar to Alberto Cabrero. May 9, 1900.

The request and the refusal in the case of the propagator of the vaccine in Miahuatlán again pointed to the funding issues between state and local governments. The named agents of the vaccine were not well prepared for the task assigned to them. Many propagators faced financial difficulty paying for the travel necessary to carry the vaccine to all towns in a district. The medical training for the responsibility of vaccinating an entire district was non-existent. Physically, as in the letters from Choapam, the job of propagator of the vaccine was difficult and tiring. It required the person to travel in less than ideal conditions to isolated towns in the mountains of Oaxaca. These factors coalesced into the problems faced by individuals charged with propagating the vaccine in addition to the agency of local authorities and vaccinators to influence the “project of modernity” to fit their local context.

It isn't working: Reform to Vaccine Legislation, 1903

In 1903 the congress of Oaxaca proposed a major reform to the vaccination project. This reform showed that the Oaxacan government and elites understood the failings of the past efforts to vaccinate and it was prepared to work to fix those weaknesses. It called for the reform of the service of the vaccine “given the importance of the vaccination service and its necessity for [illegible] the hygiene of the state.”¹³¹ The reorganization of the vaccination project had become indispensable according to an organization within the governing structure of Oaxaca¹³². This body was concerned with the efficiency and adequacy of the vaccines and argued that past legislation had been inadequate.

The reform articles were sent on December 24, 1903 and at first seemed to be primarily concerned with the monies spent on the vaccines. The letter contained the reform articles were

¹³¹ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Carpeta 3, Expediente #66, Section 19. “Acuerdo”

¹³² I cannot manage to identify the source of these reforms.

addressed to the state congress and began by referencing the decree of November 6 that “established an additional tax of three centavos for public instruction, with the objective [...] among other themes, the reorganization of the vaccination project.”¹³³ The *jefe políticos* had been able to cover the diverse towns in their region with the monies mentioned but given the importance for general hygiene Oaxaca had to offer vaccinations “efficiently and uniformly where it is possible.”¹³⁴ For that purpose, Cámara submitted the following legislative project.

The reforms represented a shift towards a centralization of the vaccinations away from the control of the rural districts. It gave the state government the power to determine vaccination zones and gave all determination to the state government and all naming of the propagator of the vaccinator responsibilities to the state governor.

The first article declared that for the better conservation and propagation of the vaccine, it “established “six regional places for vaccinations.”¹³⁵ The regions were only to be finalized when the designated municipalities replied with the information required by articles #2 and #3 of the *fracción XXIII del artículo 19 de la Ley de 24 de Noviembre, 1889*. These articles asked for the funds required by districts for the conservation of the vaccination and the funds necessary to apply it. Article #2 of the revised decree provided the greatest change from previous operations. It stated that the naming of the Propagators of the Vaccine will be completed by “the Governor of the State and he will employ the propagators and their services in the zone he designates.”¹³⁶

These reforms showed two changes. One concerned the source of monetary funds for the vaccinations. Previously, the funds were to come from the local regional municipalities but under

¹³³ AGPEO, *Secretaría del Gobierno del Estado Libre y Soberano de Oaxaca*. Carpeta 3, Expediente #66, Section 19. Letter to State Congress containing reform articles for vaccination. December 24, 1903.

¹³⁴ Ibid.

¹³⁵ AGPEO, *Secretaría del Gobierno del Estado Libre y Soberano de Oaxaca*. Carpeta 3, Expediente #66, Section 19. Letter to State Congress containing reform articles for vaccination. December 24, 1903.

¹³⁶ Ibid.

the decreto 31, the monies come from the State Treasury. The second modification refers to the responsibility of naming the vaccinator. Formerly it had been in the hands of the *jefes polliticos* of each district to identify the most educated person with whom to put in charge of vaccinations. The change however gave the state governor the responsibility, shifting almost all duties away from the regional governments. Article#3 dealt with the vaccination within the capital region and it places all responsibility on the general director of the hospital and at his assistance the “medicos de Comisaria” or medical police. The article clearly demarcated the application and organization of the vaccine within an urban context as separate and as better equipped than the vaccinations destined to be performed in the rural parts of Oaxaca. It presented a clear disconnect between the “modernized” urban spaces and the hinterland which where it was often difficult to find even a single person willing to take on the responsibilities of vaccination. These reforms were meant to operate under the current regulation laws then in effect, and in no way challenged or opposed the law passed on July 28, 1899.

The handwritten articles are accompanied by a letter dated December 25, 1900 from an unidentifiable name, addressed to the Secretary of Congress. It submits the “initiative related to the organization of the vaccination service” that asked for their consideration of the service of Camara in its realization. The records showed that on December 25 the articles were received by Marian Loto and Manuel Resey and that on December 26 they wrote to the Secretary General “declaring intent to vote [...] and to put under immediate inspection before the Executive.”¹³⁷ On December 29, a letter from Joaquin Sandoval, the General Secretary of Dispatches, wrote it was his honor to return the files relating to organization of the service of the vaccine, he inteneded to submit the discussed letters along with a copy of the published Decree to the official record. On

¹³⁷ AGPEO, *Secretaria del Gobierno del Estado Libre y Soberano de Oaxaca*. Carpeta 3, Expediente #66, Section 19. Letter to Sec. General about vaccination reform articles. December 26, 1903.

that date it was presented in the congress assembly hall then was passed along to the Secretary General for typing, publication, and circulation. The decree #31 that was made into law was designed to complement the existing vaccination legislation. The decree is typed and labeled with the state seal, and signed by Andrés Portillo and Manuel Resey.¹³⁸ The decree was sent out to all Districts with a letter asking for the acknowledgement of the organization of the vaccination service in Zimatlán, Miahuatlán, Ocotlan, Juquilla, Tlacolula, and Ejutla all responded by February 1, 1904 with their acceptance of the Decree# 31 and their willingness to pass on responsibilities to the central government.

Was this re-organization an afterthought, an act to push through, or was it deemed so important that it had to be completed in an expedient manner. From proposal, to vote, to acceptance, to publication was five days. From December 25 until its publication and circulation on December 29, decree 31 was approved in a short amount of time in comparison to earlier hygiene, in addition in comparison to the time it took to approve many other proceedings, such as the interactions between the *jefes politicos* of outer districts and the Central Government. Though it is possible that these reforms passed through and were approved according to standard form and conduct, more research is necessary to determine the influence of these reforms in practice.

Conclusion

Modern medical procedures developed in the early 19th century placed the body and its hygienic condition under scrutiny. Edward Jenner produced a vaccine that provided immunity to smallpox. The vaccine was a tool used by colonial Spain to exert a measure of control over the lives of their subjects in New Spain.

¹³⁸ The last name of this person is almost illegible in the document.

The expedition of Francisco Xavier Balmis was conceived not only as a way to use smallpox vaccinations to prevent disease, but as a way to maintain a healthy labor populace. The vaccine brought by Balmis was used to bring hygienic conditions of Europe to the “backward” peoples of the Spanish colonies. These motivations are evident in communications between Balmis and Spanish officials.

The stage had been set for the power dynamic vested in vaccinations and continued in public hygiene projects in independent Mexico. The public hygiene projects envisioned during the Porfirato mixed ideas about hygienic treatment of the body with the socially constructed ideals of “modernity” imported from Europe. Historians of Oaxaca have shown how the “project of modernity” in Oaxaca was constructed by elite who sought to replace of rural Mexico. This paper has shown through the examinations of legislation passed from 1863 to 1903 how elites in Oaxaca constructed ideas about hygienic and modern spaces that ignored the realities of their state.

The majority of Oaxaca that lay outside the capital city consisted of poor, indigenous communities with little or no medically trained staff at their disposal. The communities such as Choapam, Miahuatlán, and Teotitlán maintained communication with the central government through their *Jefe Politicos*. The *jefe politcos* communications showed the weaknesses of the vaccination projects in Oaxaca but also their own abilities to shape the implementation of the vaccine. The lack of medical staff, funding confusion, and poor communication about vaccine procedures and goals conveyed between the central government to the *Jefe Politicos* and the propagators of the vaccine of these communities shows how the people were able to negotiate the vaccine projects in Oaxaca.

The public discourse concerning hygiene during the 19th and 20th centuries focused on the conditions of the body. It introduced methods that infringed upon the private and personal sphere of the body. Modern scientific tools such as vaccinations served as a marker of a “modern” body and a hygienic person. During the colonial period, Spanish officials paved the way for extensive vaccination projects and their rationale set the tone for future hygiene projects. The independent Mexican state under the leadership of Porfirio Diaz set out to “modernize” people and spaces and smallpox vaccinations were a part of this project. However, the people of Mexico reacted in a range of ways, comprehending resistance and subversion as well as compliance. The agency of those foisted with the vaccine is evident in the communications between the state and local governments.

In this short examination of vaccinations and their role in Oaxaca I have provided evidence of the social progressivism of alleged “modernity” and how it was applied in the form of vaccinations. The “modern” represented the clean, urban, industrialized places and Mexico hoped to mimic the colonial dynamic of domination in their public hygiene strategies. Elites based their visions of a “modern” people on examples outside of Mexico and failed to take into consideration certain restrictions presented by their local circumstances. The failure of the vaccination project was due in large part to lack of personnel, lack of funds, and the reluctance of the people. The popular classes of Oaxaca received these vaccinations with skepticism and used tools of resistance to delay, obstruct, and frustrate the goals of the elites. In further research I hope to look at the larger social and political implications of these vaccines, throughout Mexico and Latin America, and evaluate the difference in the development of the vaccinations in connection to modernity projects.

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